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Cost Contribution Arrangement

An efficient tax-planning tool?

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Foreword

This thesis is written as a part of the master studies at the Norwegian Schools of Economics. The thesis sheds light on Cost Contribution Arrangement, a controversial structure for related party trade. Trade among associated entities has recently received increased attention, mainly due to its role in tax planning.

The topic of transfer pricing first caught my interest when undertaking a course on international taxation taught by Pia Dorfmueller at the University of Mannheim in 2010. After taking the course Taxes and Business Strategy at NSE, where taxation of related party transactions was a main theme, I knew that I wanted to learn more about the topic. For this reason, I chose Cost Contribution Arrangements as the topic for my final thesis.

Through this work, I have gained an in-depth understanding of the OECD's transfer pricing framework and how it interacts with domestic legislation. I have enjoyed working with this, and I find myself even more intrigued by international taxation than before I began. I both believe and hope that this knowledge will come in handy in my future working career.

I would like to thank KPMG and in particular Hans Kristian Nygaard. Thank you for taking time to provide me with advices and encouragement. Secondly I owe thanks to my supervisor Guttorm Schjelderup for his patience, guidance and constructive feedback. And last, but not least, I have to thank my family and friends for all the cheer and support.

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Summary

This thesis sheds light on Cost Contribution Arrangements (CCAs) as a tax planning tool for the multinational enterprise. CCA is a framework agreed among enterprises to share costs and risks of developing, producing or obtaining assets, services or rights. Tax planning is choices of adaption within the legal framework of tax law with an economic goal of maximizing firm value. To reduce the tax burden many multinationals try to shift profits from high-tax to low-tax jurisdictions. This paper analyzes how the cost contribution structure can play an important part in achieving this. With a focus on the OECD Guidelines, the thesis examines current legislation and illustrate its weaknesses by analyzing a fictitious case. Results show that the main tax effects of employing the cost contribution structure in place of licensing stems from elimination of withholding taxes and from market prices being replaced by costs. The analysis further illustrates that the CCA structure is prone to manipulation as the allocation of costs to a large degree depends on assumptions, choices and subjective judgment. The OECD regulation requires consistency between contributions and expected benefits, however the valuation of these may pose difficulties. Contributions of preexisting intangible property and contributions in-kind are particularly problematic to value. Moreover, valuation of expected benefits depends on uncertain estimates: e.g. the economic life of the developed asset, the timing and the amount of the benefits. New participants entering and existing the arrangements presents additional challenges. The thesis shows that the cost contribution arrangement can be an efficient tax planning tool as it is based on estimates which easily can be over- and underestimated. I conclude that there is a need for improving the legislative framework and scrutinize the structure. As each case must be viewed in isolation, the process of controlling CCAs is an expensive and difficult task.

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1 Introduction

1.1 Background and motivation

In recent years, there has been increased media coverage of tax planning as it has been known that giant firms such as Starbucks, Google and Amazon in effect barely pay any taxes (Barford, 2013). It does not seem fair that some multinationals pay as little as 3-5% in taxation on corporate profits, while smaller businesses have an effective tax rate which can be up to ten times this rate.

Tax planning has gained an important position in cost accounting and management control. Over the last two decades, the organization of the multinational company has changed dramatically. With the development of global value chains, intra-firm trade has increased in importance (Lanz & Miroudot, 2011). It is estimated that two out of three of all business transactions take place between related parties (European Commision, 2011). Transfer pricing is an important part of tax planning and considered one of the most common techniques for shifting profits between jurisdictions. OECD considers it to be a severe problem as it undermines domestic tax systems and encourages tax competition among countries (OECD, 2013a).

One transfer pricing technique less focused upon is the cost contribution structure. Since it first was introduced, the concept of Cost Contribution Arrangements (CCAs) has been considered controversial. In a CCA, participants pay their share of the costs for access to the service or asset developed. In comparison to other transfer pricing techniques, market prices are replaced by costs. The assignment of costs depends on contributions and expected benefits, and the valuation of these relies on assumptions and subjective judgment. Consequently they are prone to manipulation. Regardless of the criticism it has received, the CCA structure is increasingly being employed and can play an important role in a MNEs tax planning strategy. According to one of the big four accounting firms, Ernst and Young, CCAs can provide solutions to difficult and complicated transfer pricing issues, particularly in terms of intellectual property (Ernst & Young, 2003).

These days, there is being done a lot of work on tax planning and the topic is highly relevant. The fact that MNEs spend vast amounts on acquiring tax advice from external experts, implies that the potential cost savings from restructuring trade must be great. The tax systems clearly have weaknesses when the potential cost savings can justify hiring expensive consultants. My fascination with tax planning made me search for a topic related to this. I chose the concept of Cost Contribution Arrangements, in particular, as I saw a need to shed some light upon the subject. Although the structure already play an important role in international tax planning, it has been given little attention.

1.2 Purpose and research question

The purpose of this paper is to place focus on Cost Contribution Arrangements and their role in tax planning. The aim is to illustrate how an inadequate legislative framework can facilitate employment of CCA as a tax planning tool. The first question to be addressed is therefore: Which features of the CCA structure and present regulation enable it to act as tax planning tool? And secondly; where should the tax authorities place their focus to reduce the problem?

I argue that there is an urgent need for improving the CCA framework and that it up to this point has not been sufficiently scrutinized. I will focus on the problem through explaining current legislation and further employ a fictive case. This paper is not written with an aim to advice firms how to exploit the system, but rather to point out how existing legislation indirectly encourage tax planning and favor MNEs over domestic firms. Furthermore I hope to illustrate how tax planning has turned into an important managerial matter, no longer only a legal one.

1.3 Structure of the thesis

This thesis is a case study, structured around a hypothetical case that I have created for the purpose of this thesis. I have chosen to explore three jurisdictions I find to be particularly interesting: the US, Spain and Norway. In terms of CCA experience these jurisdictions differ greatly. In the US, CCAs are commonly employed and have been a focus for a long time. Spain has some experience, whereas Norway has very little (Ernst & Young, 2003). When

discussing tax planning, Ireland, Switzerland and the Netherlands are typical jurisdictions chosen to illustrate the issues. I was curious to look into the tax legislation of some jurisdictions less focused upon, consequently Spain and Norway were selected. The US was chosen due its great experience and extensive regulation of CCAs.

The case has been created as to show the effect of employing the CCA instead of alternative structures. CCA is mainly compared with licensing. Direct sales will also be mentioned as an alternative, but as this is different in nature and less prone to valuation issues, it is less interesting to compare. Structuring related-party trade through direct sales implies that intangible property is replaced by physical goods and manipulating transfer prices is more challenging. Moreover, related-party trade through direct sales is likely to imply a different cost structure as production is centralized in the country of R&D. This can further complicate the process of comparison.

The thesis will put a lot of emphasis on the process of developing the CCA, and less on the final results. The reason for focusing on process rather than outcome is that the final results may vary greatly depending on the case. In terms of CCAs there is not one final answer to be found. There final outcome depends on assumptions about the future, estimates chosen, valuation techniques and various decisions made in the process.

The first part of the thesis is the theory. Here I will explain concepts and legal frameworks. As both Spain and Norway rely on the OECD guidelines for transfer pricing, this framework will be explained in detail. The US on the other hand, treats CCAs by reference to domestic legislation. Thus, a greater emphasis will be put on explaining the OECD guidelines and the legislation of the US, than the domestic regulation of Spain and Norway. The second part consists of a presentation of the case, followed by a discussion and suggested solutions. In the last part of the thesis, the results are analyzed and the research questions are further addressed. Although this paper is interdisciplinary, combining law and management control, the central theory is current legislation. The main literature is therefore the OECD's regulation of Cost Contribution Arrangements, set forth in the OECD Transfer Pricing Guidelines chapter VII. Furthermore the OECD Model Tax Convention, Spanish, Norwegian and US domestic law have been employed.

2 Theory

2.1 Tax planning

2.1.1 The concept

Tax planning is a versatile term that is being employed in different settings, both in judicial and economic literature, as well as in the media. Tax planning can be executed both on the individual level and the firm level, international or national. Generally however, tax planning is carried out in MNEs as corporations operating in different tax jurisdiction have the greatest opportunities to reduce their tax base. Divergent tax systems can be exploited to reduce overall tax burden.

For tax administrators, international tax planning is considered to constitute a risk to tax revenues, tax sovereignty and tax justice. Countries are losing tax revenue they are entitled to and have to use more resources to ensure compliance. Domestic companies are harmed as the competition with MNEs get tougher. And furthermore, when MNEs reduce their tax bills, other tax payers may have to take a greater share of the burden (OECD, 2013a).

International tax planning is not a new concept. However, liberalization of financial markets and increased globalization has increased its attractiveness. Barriers for transferring assets have been reduced, while knowledge about tax planning strategies and the potential savings have become more widespread (OECD, 2013a). As the advantages of tax planning are growing, greater prevalence was to be expected.

2.1.2 Characteristics of tax planning

Though an umbrella term covering a vast set of strategies, a general feature of tax planning is adaption to differing tax policies across states with an aim of maximizing overall wealth (OECD, 2013b). An important feature is that the techniques employed are legal and not in conflict with the legislators' intentions. The firm adapts to the differing policies, it does not bend them. This adaption is a process that involves making decisions concerning the timing and method by which transactions are completed, income reported and deductions and credits are claimed (Commerce Clearing House, 1988). The tax planning strategies affect the

tax expenditure through the tax base, the tax rate and the timing of the tax payments. These factors affect the tax liability through the accrual accounting principles of the tax legislation.

The economic objective of tax planning is to maximize firm value, not solely minimize tax liability (Fallan, 2011). This specification is important as these objectives not necessarily are consistent. For instance, a firm ceasing to exist will not be liable to taxes. Dissolution of the firm will minimize taxes, but not maximize firm value. Furthermore, reducing taxes usually come at a cost. Shifting profits entail transaction costs. It is likely that tax experts must be hired and internal tax team must be paid for the extra work. If tax minimization is the ultimate goal, the firm would hire the best tax experts regardless of the price charged. This would make no sense. Tax minimization in itself cannot be the economic objective. Only if there were no costs of shifting profits, tax minimization and maximization of firm value would be consistent at all times.

This paper will be based on the understanding that strategic tax planning is choices of adaption within the legal framework of tax law with an economic goal of maximizing firm value. It is further assumed that the MNEs consider tax minimization to be consistent with maximizing the firm value.

2.1.3 Key principles for taxation of cross-border activities

There are various sets of rules that regulates the taxation of cross-border activities: internal tax law, double tax treaties and other international law instruments, such as those applicable in the European Union (Regulations, Directives, etc.). The connection to a jurisdiction is an important element in determining the right to tax. This is exercised on an entity-to-entity basis, not on the group as a whole (OECD, 2013a). Consequently, if a multinational has entities in different countries, the entities will be tax liable to the jurisdiction with which they are connected, separately from the connection of the group as a whole.

Tax systems can be divided into worldwide and territorial systems. The worldwide system taxes its residents on their worldwide income. This is resident taxation. Worldwide income include all income also that generated from foreign controlled subsidiaries. The territorial

system on the other hand would tax all income generated within the jurisdiction (OECD, 2013a). This implies that all income generated within a country will be taxed regardless of the owners' residency. This is source taxation.

Interaction of domestic tax systems can lead to an overlap. An item of income can for identical periods be taxed by more than one jurisdiction, thus resulting in double taxation. Double taxation is the classical problem in international taxation. It is seen as unfortunate due to lack of economic justice and efficiency. Furthermore, it hinders development of international trade and economic relations in general (OECD, 2010b). To avoid companies being taxed by two jurisdictions, most countries have signed tax treaties. These agreements regulate who's entitled to tax if an entity is subject to double taxation. The OECD model treaty is widely employed, and so the underlying principles of the treaties are quite uniform. The newest version of the treaty is the OECD Model Tax Convention on Income and Capital 2010. The framework itself is not binding law, however as most countries have incorporated it into domestic law, in effect it is (Bjerke, 1997). Nonetheless, transactions can also leave gaps, resulting in income not being taxed anywhere and so-called double non-taxation (OECD, 2013a). This is where tax planning come into play. By considering differences in tax systems and employing tax planning strategies, a firm may achieve a situation of double non-taxation. Traditionally, less emphasis has been put on filling these gaps.

The OECD

The tax authority in the OECD is the Council of Organization for Economic Cooperation and Development. OECD's framework for transfer pricing was first approved in 1995 as to provide guidance for the development of internal tax law (Peters, Preshaw, & Luquet, 2004). Since this, the original version of OECDs Transfer Pricing Guidelines has been supplemented with chapters regulating the pricing of intangibles, services, cost contribution arrangements and guidelines for conducting advance pricing arrangements. OECD member states are encouraged to follow these guidelines in their examination practices and to undertake their analysis of transfer pricing from that perspective (OECD, 2010b). The guidelines carry considerable weight and is of great importance and influence in most jurisdictions today (Torvik, 2013).

The OECD Model Tax Convention art.9 regulates trade between associated enterprises. It also introduces the concept of arm's length pricing. The OECD Transfer Pricing Guidelines for Multinationals further provide guidance on the application of the article. They guidelines describe how to apply the Arm's Length Principle (ALP) for valuation, for tax purposes, of cross-border transactions between associated enterprises.

The US

The Internal Revenue Service (IRS) is the tax authority in the US. Residents are taxed on worldwide income, with a credit or deduction for taxes paid on foreign income (Leibowicz, 2013). In the US, worldwide income includes most gross income, also passive income such as dividends, interests, royalties etc.). Resident taxation hinders reduction of tax burden through outbound transactions. Inbound transactions, i.e. transactions of foreign companies operating in the US, are taxed based on the source principle. Any firm generating income in the US is therefore liable to taxation. However, the regulations set forth by the IRS can be set aside in the case of a tax treaty. These always take priority over the IRS. (Leibowicz, 2013)

For corporations with taxable income above US$ 18,333,333 a flat rate of 35% applies. For those earning less, there is a graduated rate starting as low as 15%. Royalties received by a foreign corporation for the use of property in the US are subject to a 30% withholding tax, unless rate is reduced through a tax treaty (Deloitte, 2013a).

Norway

The Norwegian tax authorities are named the Norwegian Revenue Authorities. Most of the 85 treaties that Norway has entered into have few deviations from the OECD Model Treaty (Brudvik, 2013). Although the model treaties play a central role in Norwegian tax legislation, domestic law is still what determines the jurisdiction to tax. The Norwegian Tax Act §§ 2-1 to 2-5 regulates who are tax liable to the Norwegian Tax Authorities. The general rule is that all residents, whether physical or legal, are taxed on their worldwide income. A resident is a company incorporated in Norway or a foreign company with effective management and control located here.

Taxable income includes ordinary business income, interests, royalties and gains on foreign currency. Furthermore, non-residents may also be tax liable to the extent income is generated in Norway or related to Norway in another manner (Brudvik, 2013). This implies that resident companies are subject to corporation tax on worldwide income and capital gains, while non-resident companies will be taxed on Norwegian sourced profits, including income derived from a permanent establishment in Norway. Tax treaties can only ease the tax liability authorized by Norwegian law, never tighten it (Brudvik, 2013).

In Norway the corporate tax rate is a flat rate of 27% (Finansdepartementet, 2014). The tax is imposed on company profits which can consist of business income, passive income and capital gains. There is no withholding tax imposed on royalties (Deloitte, 2013b).

Spain

The tax authorities in Spain is Agencia Estatal de la Administración Tributaria and jurisdiction to tax is determined by the Spanish corporate income tax law. Residents are subject to corporate tax on worldwide income. Taxable income includes all business profits and capital gains, less deductible expenses. Non-residents are taxable on source income and gains. However, as Spain has concluded over 70 tax treaties, many tax issues are regulated by these instead of the domestic regulation.

As in Norway, a company is deemed to be resident in Spain for tax purposes if it was incorporated under Spanish law, that its registered office is located in Spain or that its effective management headquarters are in Spain (Deloitte, 2012b). The general corporate tax rate in Spain is 30%, but there is a reduced rate for small and medium-sized enterprises. There is also special regulation for the Canary Islands. Spain has imposed withholding tax on royalties. In 2013 the rate was 24.75% (Deloitte, 2012).

2.1.4 Transfer pricing and base erosion

When discussion tax planning, transfer pricing and profit shifting are natural components. Transfer pricing is the act of pricing transactions or transfers between two associated entities. The OECD Model Tax Convention states that two enterprises are associated if “an enterprise of a Contracting State participates directly or indirectly in the management,

control or capital of an enterprise of the other contracting state", or "the same persons participate directly or indirectly in management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State"[1]. This implies that two parties are associated when a person or an enterprise in one state holds an indirect or direct interest in an enterprise located in another.

When independent enterprises transact, the conditions of the transactions are generally determined by market forces. Contrarily, for associated parties and controlled transactions there may be many factors influencing the price. Although the entities may be considered as separate entities for tax purposes, they still belong to the same economic entity with an ultimate goal of maximizing joint profits. Transfer prices do affect how profits are allocated among affiliates, and thereby their tax base. The MNEs overall tax burden is reduced when profits are shifted from high- to low-tax jurisdictions. Profits are increased when costs are reduced. As taxes commonly are considered costs of doing business, minimizing these is often a goal.

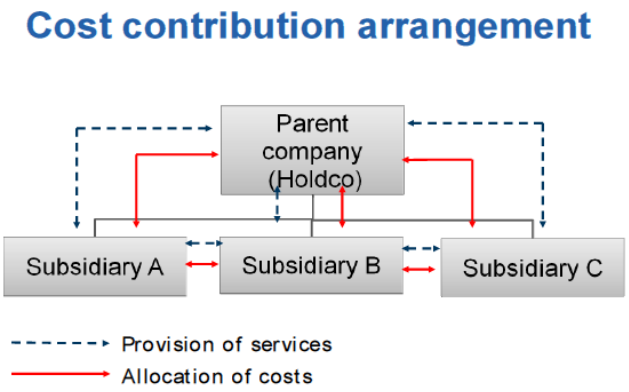
In order to reduce profit shifting and base erosion, companies are limited from setting transfer prices freely. The OECD guidelines and the Arm's Length Principle (ALP) are in effect law in many countries. The ALP is the international standard that the OECD member countries have agreed should be used for determining transfer prices. The OECD Model Tax Convention article 9 defines the Arm's length principle as follows: "where conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly". Transactions between related parties, so-called controlled transactions, must be priced as if the entities were not associated. However, as we will come back to, enforcing compliance with the ALP is challenging.

[1] OECD Model Tax Convention art.9 subparagraphs 1a and 1b

Both in the regulation of the US and the OECD guidance is not exhaustive and choice is still an important part of transfer pricing. As there is a vast number of varieties of intra-trade structures, creating an exhaustive legislation is very difficult.

2.2 Cost Contribution Arrangements

2.2.1 The concept



(EU Joint Transfer Pricing Forum, 2012)

Article 8.3 of the OECDs guidelines for transfer pricing defines Cost Contribution Arrangements (CCAs) as a framework agreed among enterprises to share costs and risks of developing, producing or obtaining assets, services or rights. The CCA should also determine the nature and extent of the interests of each participant in those assets, services and rights (OECD, 2010a). In the US, the equivalent to the CCA is the Cost Sharing Agreement (CSA). The CSA has many of the same characteristics. The IRS defines the CSA as "an agreement under which the parties agree to share the costs of development of one or more intangibles in proportion to their shares of reasonably anticipated benefits from their individual exploitation of the interests in the intangibles assigned to them under the arrangement"[2]. (United States Treasury Regulations, 1996).

Although the definitions seem very similar at a first glance, there are some differences between the two. The main difference is that the CCA is defined as a framework, whilst the CSA is an agreement as such. Moreover, CCAs cover the costs and risks of developing,

[2] The US Internal Revenues Code section 482-7(a)(1)

producing or obtaining assets, services or rights while the CSA is only concerned with the research or development of intangibles. Thus the definition of the CSA is narrower than that of the CCA. For the purpose of this paper, they will in the continuation be treated as equals.

The historic development of CCAs and its alternatives

During the last decades, an increasing number of entities have moved operations out of their country of incorporation. The number of MNEs is growing, and so is their global presence as they are investing in more countries than ever before. Initially, foreign direct investment entailed duplication of activities, such as establishing a distribution center or a sales office simply to gain access to new markets and circumvent trade barriers. Headquarter activities were still concentrated in the MNEs home country (Lanz & Miroudot, 2011).

In the 1990s, MNEs began to fragmentize the production process. They realized that by specializing vertically, quality could be improved and costs could be reduced. Vertical integration and offshoring production became common. Trade costs and production factors determined where facilities where located. It became common to buy services from associated affiliates instead of external parties. In early transfer pricing regimes, there was great freedom as to how transfer prices were set. Each country had their own regulation and sometimes they conflicted. With greater volumes and more complex transactions, the international community recognized a need for change. In the late 20th Century the US treasury performed substantial work on the matter and revised its corporate income tax regulation over the 1986-94 period, and in 1995 the OECD issued its first major update since 1979 (Eden, 2001).

The ALP was implemented, but unfortunately it did not eliminate the problem, only reduced it. MNEs found ways to circumvent the ALP. The royalty structure soon became common due to its function as a tax planning tool. Royalties are payments for exploiting intangible rights such as patents, copyrights and knowhow (Jousma, n.d.). In 1999 US parent companies received royalties of US$ 23.3bn (Kleinert, 2004).

As MNEs transfer an increasing amount of knowledge and technology abroad, structuring this trade efficiently has become even more important (Kleinert, 2004). Taxes are seen as a great cost for MNEs, thus tax planning has grown popular. To prevent MNEs implanting the licensing structure solely for tax planning purposes, many jurisdictions have imposed

withholding tax on royalties. Thus, royalty payments are taxed in the source country and also as income in the hands of the recipient. For the MNEs, the CCA structure is seen to solve this issue as few jurisdictions view contributions as taxable income (Holmes & Holmes, 2005). As participants only transfer costs between them and terminate the arrangement before income generation starts, assets can be transferred without being subject to taxation. Current CCA regulation is flexible and the arrangements are increasing in popularity (Ernst & Young, 2003).

2.2.2 Characteristics of the CCA

CCAs are most commonly practiced in industries with high R&D costs. Typical industries are those of software, pharmaceuticals, biotechnology, chemicals, oil and gas (Ernst & Young, 2003). For an arrangement to qualify as a CCA in accordance with the OECD transfer pricing guidelines chapter 8, it must have the five following characteristics (Peters, Preshaw, & Luquet, 2004):

1. Cover a certain activity: developing, producing or obtaining assets, services or rights
2. A contractual agreement between various participants
3. Not be regarded as a distinct judicial entity or a permanent establishment
4. Result in a mutual benefit, where each participant's proportionate share of the total contribution is consistent with the proportionate share of the expected benefits to be received from the CCA
5. Each participant must be entitled to exploit its interest in the CCA activity separately as an effective owner thereof.

First, the arrangement must involve an activity that will be performed by various participants. The activity can be research, development, common marketing, provision of a service etc. Participants do not necessarily have to be related parties, but in practice they usually are. Independent enterprises prefer other structures than to share and pool resources (HM Revenue and Customs, 2013). Secondly, the term "mutual benefit" require that each party receive a benefit from participation in the arrangement. The participant's proportion of the total expected benefit must be consistent with the proportion of the total contribution. Expected benefits comprise both the development and the result of the activity. This criterion is in effect a deterrent for potential misuse of the CCA rule. The

criterion hinders participants from using CCA as a mechanism for transferring profits from one participant, the "contributor", to another, the "benefit receiver". An allocation method reflecting the relation between benefits and costs incurred should be employed (Valuation Research Corporation, 2008). Thirdly, each party must have a defined interest in the project. Having an interest implies that each party is entitled to exploit its interest in the CCA activity separately as an effective owner and not as a licensee, and so without paying a royalty or other consideration to any party for that interest. Each participant becomes an owner of an interest in the results, and so participants has to be compensated by the other participants exploiting this interest (Barbenec, 2010).

Another distinctive characteristic of the CCA is that it would not be regarded as a separate juridical entity in its own right nor as a permanent establishment of all the participants (Peters, Preshaw, & Luquet, 2004). The OECD defines a permanent establishment as a fixed place of business[3]. Per se, the CCA is simply an arrangement where the participants contribute and receive a benefit consistent with their contribution. The arrangement is not a separate entity liable to taxation. To illustrate how the CCA differs from the more common licensing structure, we can compare the two in a table, see attachment 1.

The purpose of CCA

Documenting economic substance is important when structuring a CCA. The business' decision to form a CCA can be justified by various motives, e.g. economies of scale or sharing of risks, skills and resources (EU Joint Transfer Pricing Forum, 2012). First, CCAs usually require less administrative work than complicated web of intra-firm transactions such royalties and service fees. Second, when more parties are involved the potential loss of a commercial failure is reduced. This may enable larger investments and more risk taking. Moreover, it might be that certain knowledge is required and acquiring this is costly. Sharing experience and expertise will result in a greater base of knowledge than if all were operating independently. In addition, pooling resources can be a more cost efficient approach to acquiring new assets and may allow smaller entities access to costly equipment.

[3] OECD Model Tax Convention on Income and Capital 2010 art.5

For the entities involved, the CCAs can also be beneficial from a taxation point of view. CCAs are particularly beneficial when global development activities would otherwise require global cross-licensing arrangements which can result in a greater tax burden. Royalties may result in additional taxes in the form of withholding taxes as well as additional scrutiny from tax authorities (Valuation Research Corporation, 2008).

Compared to licensing, in CCAs market prices get replaced by incurred costs. As a consequence, the CCA can be particularly profitable when development takes place in the high-tax jurisdiction. In such a case more profits will remain in the low-taxed country and the group's overall tax burden will be reduced. Through CCAs enterprises can also mitigate intangibles off-shore by having new participants buy in to the existing intangible property and gain the rights to a portion of the income attributable to the intangible property (Valuation Research Corporation, 2008).

2.2.3 Different types of CCAs

There are two major groups of CCAs. The most common is a CCA created to research and develop intangible property to the benefit of more participants. The second type is a CCA made to fund or obtain a certain service. Alternatively one can think of a third type; a hybrid of the two groups.

(1) CCA to perform research and development or produce or acquire assets or rights (R&D CCA):
The purpose of an R&D CCA is mainly to research and produce or acquire intangible property. An example could be several participants uniting to develop a new software. Another could be participants pooling their resources to buy a patented technology from an external party. The commercial rationale for such an agreement is to share risk of financial loss. As a commercial failure would be more manageable if split on several participants, risk sharing may enable participants to take more chances than they would independently. For smaller entities, participation in a CCA may be the only approach to acquire an intangible asset. As it only has to contribute with a portion of the R&D costs, a CCA provides it with greater solidity. Other reasons for participating might be administrative barriers or lack of required knowledge or skills. The results of a CCA activity is unknown, hence the amount of benefits and their timing are uncertain. The risk of failure is normally significant.

The outcome of a successful CCA activity is an interest in the developed asset, which must be exploited to the participant's own benefit, and not the benefit of the others. The interest may be a right to produce or market an asset in a specific geographic area or for specific applications. The legal ownership can be joint or one participant may be the legal owner of the property. However, economically all the participants are co-owners. (Barbenec, 2010; Peters, Preshaw, & Luquet, 2004; OECD, 2010a)

(2) CCA to share services (Pure Services CCA):

The participants pool their resources to obtain a certain service which they can use separately. They can for example develop a shared service center that enables them to acquire services of identical quality as if purchased externally. The rationale behind the Pure Services CCA is to share costs, and thereby ensure efficiency and avoid duplicity of operations. As a consequence the result of the agreements is not a tangible or an intangible asset or right. The centers are typically shared managerial, technical or administrative service centers. The benefits are immediate or short term, being ordinarily realized the period in which the service activities are performed. The risk of commercial failure is not severe. (Barbenec, 2010; Peters, Preshaw, & Luquet, 2004)

(3) The combination of the two types of CCAs (Hybrid CCA):

The third group is a combination of the two. The purpose of the Hybrid CCA is not only to develop or acquire the asset, but also join marketing, centralize purchasing and managerial service or share technical support (Barbenec, 2010). As an example: when several participants join forces to develop new software and in addition establish a common customer support center, they would be creating a hybrid CCA.

Note that some CCAs do not fit into any of these three categories. An example is CCAs formed to facilitate joint acquisition of tangible property, a structure which is allowed in most OECD jurisdictions. CCAs mays also be developed with a purpose of reducing tax liability (Peters, Preshaw, & Luquet, 2004).

2.2.4 Regulation of Cost Contribution Arrangements

The OECD

The OECD has developed guidelines for Cost Contribution Agreements. These are not binding law, but as the OECD Guidelines generally are considered to provide the best international practice concerning taxation of CCAs, they do in effect regulate most. Countries have taken different approaches in adopting the OECD Guidelines. Some have essentially implemented the framework as a whole, whereas others have chosen not to implement any part. Out of those that have implemented the guidelines, one can further divide into two groups: Those that have implemented the OECD Guidelines into their domestic law and those in which the tax authorities follow the guidelines despite not being legally obliged to do so. The OECD regulation does not determine the deductibility of contributions. This is determined by domestic law in the respective country. Usually this is based on the nature of the cost contribution activity (Deloitte, 2012).

The US

CCAs are common features of multinationals doing business in the US. A lot of emphasis has been put on developing extensive regulation and the tax authorities have plenty experience with transfer pricing and CCAs. Therefore it is often referred to the US regulation if the OECD guidelines and domestic law are insufficient. The arrangements are most common for sharing intangible development costs in relation to technology, business process intangibles, brand intangibles and customer based intangibles. They are also very common in the pharmaceutical industry. (Ernst & Young, 2003)

The US has specific regulation for treatment of CCAs set forth in domestic law. These are found in the Code of Federal Regulations. The main concepts of the OECD Guidelines are implemented. There are two key differences to be found: (1) the OECDs definition of the CCA is more flexible than that of CSA in the US regulation and (2) the US permit increased hindsight when tax authorities challenges the allocation of costs to a taxpayer (Holmes & Holmes, 2005). In general the US regulation is more far-reaching than that of the OECD. However, in most domestic regulation and practical administration of CCA, the US would respect the OECD guidelines (Ernst & Young, 2003). The Code of Federal Regulations defines

a set of methods that can be used for valuating contributions. As mentioned, the US differentiate between CCA for services and CCA for intangible property. Different methods are recommended for different types of arrangements. The regulation does, however, require that the best and most reliable method is employed[4].

For the contributor, the contributions are generally tax deductible. They can be in the form of royalties, instalments or a lump-sum payment. To deter MNEs from manipulating expected benefits and contributions, the arrangements are subject to detailed audits in the US. CCA payments in each year must be examined and adjusted if necessary to ensure that they are in proportion to the participants reasonably anticipated benefits from the intangibles used. Given the administrative burdens associated with a CCA in the US, the accounting firm Ernst & Young recommends considering alternative structures such as joint ventures and cross licensing agreements (Ernst & Young, 2003). An advantage of the CCA structure is that for the recipient the contribution is not taxable income (Holmes & Holmes, 2005).

Norway

CCAs are not widespread in Norway. They are most often found in industries relating to oil & gas and development of software or technology (Ernst & Young, 2003). The low number of CCAs is reflected in the Norwegian tax law; there is no particular regulation of CCA in domestic law. The tax authorities rely on the General Tax Act and has not implemented the OECD Guidelines in domestic law. Nevertheless, in practice the tax administrators generally follow the guidelines (Zimmer, 2009). The CCAs can cover R&D, intellectual property (other than technology), shared services and stock options. Contributions would normally be deductible for tax purposes, but can be challenged on the basis of proportionality and domestic tax regulations. The General Tax Act § 6-1 states that a group rightfully can subtract costs spent to acquire, maintain or secure taxable income. This implies that the entity can subtract its proportion of the costs to the degree it is expected to benefit from the CCA (Zimmer, 2009). Costs can only be deducted if they are seen to be an investment in expected future benefits.

[4] The Code of Federal Regulations § 1.482-1(c)(1)

The Arm's Length Principle is incorporated in Norwegian Law. According to § 13-1 in the General Tax Act the contract regulating trade between two or more associated tax subjects should be developed as if they were independent of another. For § 13-1 to apply, there has to be a common interest, one of the parties must have faced a reduction in income or wealth and the reduction must be due to the common interest. A definition of related parties cannot be found in the tax law. In relation to the duty to specify and document controlled transactions however, associated entities are defined in § 4-12(4), of the Tax Assessment Act. According to this paragraph the following entities shall be deemed to be associated:

a. Any company or entity that, directly or indirectly, is at least 50 percent owned or controlled by the entity obliged to specify or document;

b. Any individual, company or entity that, directly or indirectly, has at least 50 percent ownership of, or control over, the entity obliged to specify or document;

c. Any company or entity that, directly or indirectly, is at least 50 percent owned or controlled by any entity that is deemed to be an associated party pursuant to Item b; and

d. Any parent, sibling, child, grandchild, spouse, cohabitant, parent of a spouse and parent of a cohabitant of any individual who is deemed to be an associated party pursuant to Item b, as well as any company or entity that, directly or indirectly, is at least 50 percent owned or controlled by such individuals.

The Norwegian Tax Act does not provide further guidance about how the AL price should be calculated, nor how to treat cost contribution arrangements in particular. For this, § 13-4 refer to the OECD guidelines.

Spain

CCAs are common amongst MNEs doing business in Spain. They are most often seen in relation to cost sharing in the automotive, computer hardware and software, chemical and machinery industries. In Spain the CCAs are limited to costs related to intangibles. This includes research & development and intellectual property (Ernst & Young, 2003).

Spain has implemented the OECD Guidelines in their domestic law. Article 16 of the Spanish Corporate Income Tax law provides the regulatory framework for CCAs. Associated parties is defined in § 16-3. It is deemed to be associated:

a. An entity and the owners of its equity (at least the 5% or 1% when the shares are carried out on official secondary securities regulated markets), or the spouse, ascendants or descendants

b. An entity and the member of its board of directors or their administrators (includes the fact administrators) or the spouse, ascendants or descendants

c. Two entities of the same group

d. An entity and the partners (or the spouse, ascendants or descendants) of an entity of the same group

e. An entity and the members of the board of directors of an entity of the same group or their administrators

f. Two entities where the second entity owns, indirectly, at least, 25% of the capital of the first one

g. Two entities when the same person (or the spouse, ascendants or descendants) or entity own, directly or indirectly, 25% of the equity

h. An entity resident in Spain and their permanent establishment situated in other country.

i. An entity resident in other country and their PE situated in Spain

j. Two entities of the same group liable to tax under the cooperative group's regime

An agreement should be signed prior to entering a CCA and should specify the "nature of the services", the "methods of distribution", and the "right to use the results". The tax authorities generally follow the OECD guidelines. Contributions are often treated as deductible tax expenses for the contributor to the extent they qualify as revenue expense. Contributions must be in line with the ALP. Excess deductions could trigger an enquiry by Spanish tax authorities. Proportionality of cost and benefit principles and demonstration of value for money are keys for deductibility (Ernst & Young, 2003). As in most countries that follows the OECD guidelines, contributions are not taxable income for the recipient (Holmes & Holmes, 2005). When reviewing distribution criteria the Spanish tax authorities generally focus on the rationality and continuity of the arrangement. Tax authorities are unlikely to attempt to "unbundle" and value the CCA so long as the CCA is accompanied with the

transfer pricing analysis performed by an independent agent or advisor. Although the CCAs are common, the focus of tax authorities has been low to medium (Ernst & Young, 2003).

2.2.5 Structure of the CCA

The structure of a CCA will depend on the type of activity, choices made by the participants involved and the jurisdictions in which they are located. The OECD Guidelines, as in practice is employed by most, do however impose certain conditions that the structure must meet.

The Arm's Length Principle

The OECD guidelines art. 8.13 instruct the members of the CCA to demonstrate consistency with the Arm's Length Principle. Applying the ALP on a CCA implies that the terms of the arrangement must be consistent with what unrelated parties would agree upon under comparable circumstances given the reasonably expected benefit. Evaluating consistency with the ALP can, however, be troublesome. Finding comparable circumstances might be impossible as associated enterprises may enter into arrangements that non-associated affiliates would not. Hence, it is not useful undertaking a traditional comparability analysis for transfer pricing.

In relation to CCAs it is more helpful to require that the proportions of contributions and expected benefits correspond. An agreement between rational unrelated parties would be structured in such a manner. No independent entity would enter into an arrangement if they were to receive a smaller proportion of the benefits than what they were contributing. For each CCA it is therefore necessary to calculate expected benefits in order to find the appropriate contributions. Unfortunately, predicting the expected benefits correctly may be a complicated process. First a measure for benefits must be decided upon. This can be challenging as the expected benefit also can be sharing of risk, synergies of pooling knowledge, and cost saving through economies of scale. (OECD, 2010a). Second, the expected values of the measure must be estimated. This is particularly a problem in relation to R&D activities where the outcome might just as well be a failure as a success.

As it is expected that a firm's ultimate goal is to maximize profits, the ALP requires that the arrangement must be structured so that: (1) Each participant's proportionate share of the

overall contribution is proportional to the overall expected benefits to be received under the arrangement, and (2) each participant will have the possibility to exploit the asset as if owner, i.e. without paying any royalty or other consideration to any party for that interest.

The process of controlling consistency with the ALP can be broken into three steps:

1. Define the participants
2. Measure each participant's contribution
3. Determine whether allocation is appropriate

Identifying the participants

Identifying the participants may not be as straight forward as it seem. The OECD Guidelines art. 8.10-8.12 statuses that all participants must have a reasonable expectation that they will benefit from the arrangement. Benefitting solely from performing the activity is inadequate. Each party must benefit from the results. Thus if a party do not have a reasonable expectation of being able to exploit or use the interest it has been assigned, it cannot be considered a participant of the CCA.

Requiring an expected benefit does not require that the activity in fact will be successful. For example, research and development may fail to produce commercially valuable intangible property. However if the activity continues to fail to produce any actual benefit, the tax authorities may question whether independent parties should continue their participation. (OECD, 2010a)

Measuring contribution

The participants must measure the value or extent of their contributions. All contributions must be taken into account, including property of services that are used partly in CCA activity and also partly in the participant's own business activities and also contributions made in kind. In terms of valuations, there are several techniques that may be employed. Which method that best reflects the AL price, depends on the type of CCA, the situation and the conditions of the agreements. In art. 8.15, the OECD states that different countries have different experiences and regulations as to how contributions are measured. Art. 8.16 further argues that valuation should be based on recognized accounting principles and the

actual facts. Consistency in method employed is important to ensure that the real values of the participants' contributions can be compared. If one participant's contribution is measured using market value, market value has to be employed for determining all contributions. For a service CCA, the contributions are usually valued at cost because it is expected that there are small differences between pricing at cost and market value.

The flexibility of the legislation may also be troublesome. As countries measure contributions differently, the risk of double taxation rises. Some countries even require employment of different techniques when valuing different types of contributions: One country may require that contributions of services is measured according to accounting costs, while contributions of tangible property is required to value the contribution according to market value (Peters, Preshaw, & Luquet, 2004).

US regulation deviate from the OECD with regards to how contribution is valued. In the US contribution is essentially defined as accounting costs. Usually this implies R&D costs (Peters, Preshaw, & Luquet, 2004). The valuation must therefore follow regular accounting principles. This implies that some contributions such as those made in-kind are not considered contributions if they do not represent an accounting cost. In contrast, the OECD framework art.8.16 states that all contributions should be taken into account, also those not directly reflected in the accounts. The determining factor is whether it is likely that independent enterprises would have done so in comparable circumstances.

Some of the most complex issues related to CCAs are those involving contributions of existing intangible property (IP). Contributions like these are common when the R&D CCA is established in order to develop the next generation of the IP. The OECD regulation only indirectly addresses the issue in art. 8.23 where it is stated that no part of a contribution can impose royalty payments for the use of IP except to the extent that the contribution entitles the contributor to obtain only a right to use the intangible property belonging to a participant and the contributor does not also obtain a beneficial interest in the property itself. To measure the contribution, first one must establish the basis upon which existing IP has been contributed. Does the contribution of IP include a right to use existing IP outside the CCA? When the basis has been established, the value must be measured. The IRS

provides more guidance than the OECD and has pushed for evaluating the IP based on net present value of future residual profits or by using market capitalization and market acquisition values. These values should be treated as buy-in and buy-out payments (Peters, Preshaw, & Luquet, 2004).

Furthermore, there is great controversy regarding which asset that can be defined as intangible property (Heriford, Keates, Lamoureux, & Wright, 2013). Special topics of discussion are workforce in place, goodwill and going concern value. Overvaluing or undervaluing the IP is a way to manipulate the additional cost burden the entity will be given and thus the tax burden. In general, the fact that different countries have different definitions of costs depending on the nature of the contribution and that some uses regular transfer pricing rules to value some kinds of contribution while others are valued according to specific CCA rules, makes consistency difficult.

Appropriate allocation?

After measuring the contribution, the next step is to evaluate whether allocations are appropriate. The OECD Guidelines art. 8.19 states that no specific result can be provided for all situations, but that the question rather must be resolved on a case-by-case basis. There is, however, a generally accepted methodology for controlling that the allocation of the contributions is appropriate. Consistency between expected income and contribution is key. To control the consistency, shares of expected benefits must be estimated and compared with the contributions.

The OECD guidelines art. 8.19 suggests that expected benefits should be based on anticipated additional income or cost savings arising from the CCA activity. In practice, employing these direct measures are often impracticable, and so indirect measures are more commonly employed (Barbenec, 2010). OECD acknowledges that indirect measures may be more helpful in some cases, and further suggest that allocation keys may be based on expected sales, units produced or sold, gross or operating profits, the number of employees or capital invested. The choice of allocation key should be based on the nature of the CCA activity and the relationship between the allocation key and the expected benefits. In terms

of measures, in most aspects the IRS respects the OECD framework[5]. The important point is that one chooses the most reliable estimate based on data and information available.

Estimates are uncertain as they are based upon expectations. If circumstances change the prospects for the future, the participants should adjust proportionate shares to reflect this. Nonetheless, as estimates usually are tax deductible and determine the distribution of profits and the tax bases, firms might be tempted to exploit the uncertainty and over- or underestimate to shift profits to more favorable tax regimes. To avoid this from happening, the OECD Guidelines art. 8.20 states that the tax authorities may make inquiries if actual results differ widely from projections. They must then assess whether the projections would have been considered acceptable by independent enterprises in comparable circumstances, taking into account all the developments that were reasonably foreseeable by the participants, without using hindsight. The IRS § 1-482.7(f)(iv)(B) are more specific and requires that an adjustment is made if the divergence between the participants estimated benefit and the actual benefit share is higher than 20%. Then the estimation method applied will be considered unreliable.

Consequences if not in accordance with the ALP

If the CCA is not consistent with the ALP, the guidelines require an adjustment. The character of the adjustment will depend on the facts and circumstances, however, most commonly an adjustment of net contribution is made through imputing a balancing payment in accordance with art. 8.18. If the parties' proportionate share of total contribution, adjusted for any balancing payments, is not consistent with the participant's expected benefit, the tax authorities are entitled to adjust the contribution. Tax administrators should however try to avoid making minor adjustments. Adjustments should not be made based solely on data from a single year. (OECD, 2010a)

If the facts and the circumstances of the agreement indicate that the reality of the arrangement differs from what was originally agreed by the participants, it can be questioned whether the arrangement was set up only to obtain more favorable tax returns. If this is the case, art. 8.29 states that the tax authorities can determine the tax

[5] The Code of Federal Regulations § 1.482-7(f)(3)(iii)

consequences as if the terms of the agreement had been consistent with those that might reasonably have been expected had the arrangements involved independent entities. (OECD, 2010a). Where a substantial discrepancy from the arm's length principle has been present over time, art. 8.30 states that the tax authorities may also disregard parts or all of the purported terms of a CCA. The OECD does not set forth a certain time limit as to when the arrangement should be adjusted, this question is up for the respective jurisdiction to decide. In Norway, this is regulated by the Norwegian Assessment Act.

2.2.6 Restructuring an CCA

In practice it is not uncommon that the participants of a CCA change during the lifetime of the arrangement. Restructuring the CCA is necessary when participants enter into and withdraw from the arrangement or their participation is limited in time. Usually participants enter into an agreement to gain access to new assets or technology. When the participant no longer reasonably can expect a benefit from any own activity relating to the CCA, the OECD Guidelines require that it withdraws from the arrangement. Some entities may have other motives than cost sharing when entering a CCA. An example could be to offshore assets. In order to deter firms from misusing the CCA structure, the OECD Guidelines chapter 8.E put forth certain criterions as to how the restructuring should be executed.

Buy-in payments

A buy in payment is a payment made by a new entrant to an already active CCA for obtaining an interest in any results of former CCA activity. When a new participant enters into an existing agreement interests are transferred from the original participants to the entrant. According to the ALP they will have to be compensated, and this compensation should be determined based on the value of the interest the entrant gains. When calculating the value of the interest, the proportionate share of future benefits must be taken into account. This is an uncertain estimate and prone to manipulation. Art. 8.32, however, states that if previous CCA activity is of no value, there will be no buy-in payment. If the new entrant brings some earlier acquired value into the new arrangement, then this have to be withdrawn from the buy-in payment. This if, and only if, the parties' respected contribution can be properly documented. As with valuation of regular contributions, the valuation process becomes even more complicated when the new entrant brings intangible assets to the arrangement.

Some jurisdictions allow buy-in payment's in the form of an ongoing royalty. This provides an opportunity as royalties are tax deductible (unlike many lump sum buy-in payments), but also a potential obstacle as a royalty may be subject to withholding tax. (Ernst & Young, 2003)

As the OECD, the IRS also require a buy-in payment for any intangible made available to the CCA group. In the US, the buy-in can be in the form of royalties, instalments or a lump-sum payment. Accepting royalties as a buy-in payment provides the CCA with a tax planning opportunity. This is due to the fact that royalties are tax deductible, unlike many lump sum buy-in payments. Royalties can also represent a potential obstacle as a royalty may be subject to withholding tax. (Ernst & Young, 2003). In contrast to the US, the OECD only accept royalties as payments if the contributor does not obtain a beneficial interest in the intangible property itself[6]. In Norway buy-in payments are required when appropriate. If there is a reciprocal benefit to entrants and existing participants, payments can be avoided (Ernst & Young, 2003). In Spain buy-in payments are allowed and treatment would be subject to domestic tax principles. Withholding tax should not apply to buy-in or contribution payments if there is a double tax treaty in place with Spain. For non-treaty countries, domestic withholding tax rates apply. True-up/balancing payments may be done at year-end to align costs with benefits. (Ernst & Young, 2003)

Buy out-payments

A buy-out payment is a compensation which a participant that withdraws from an already existing CCA for may receive from the remaining participants for an effective transfer of its interests in the result of past CCA activities (OECD, 2010a).

If a party decides to exit an existing CCA, a compensation should be paid to this party on the basis of the proportionate share of future benefits generate through the contribution given. This is set out by the arm's length principle. If earlier CCA activity has not generated any

[6] OECD Transfer Pricing Guidelines art. 8.23

value, art. 8.35 states that no buy out payment should be paid. The extent of the buy-out payment has to be set based on the perspective of the remaining participants.

If the CCA ceases to exist, the arm's length principle require that each party receive a real interest in the results of the CCA activity. This interest must be in accordance with the proportionate share of the contributions to the CCA. In calculating this, the adjustments, e.g. buy-out payments, will have to be included.

According to US legislation, a buy-out payment is required when a participant exists a CCA. In Norway, as with buy-in payment, the buy-out payments are required when appropriate (Ernst & Young, 2003).

Consequences of not following the arm's length principle

As with any CCA, tax authorities may adjust the buy-out or buy-in payments if the arm's length principle has not been followed. They can also adjust or disregard a CCA if one of the following criteria are met:

- Facts and circumstances indicate that reality differs from the terms purportedly agreed by the participants
- Substantial discrepancy or disproportion between purported contribution and benefits over time
- The CCA is not based on sharing of costs, i.e. In service situations
- Non-commerciality – CCA designed just for tax purposes

The fact that the tax authorities can adjust the payments is essential for avoiding manipulation. However, whether the parties have set the payments with good faith or not, doesn't really make any difference. If the proportionality is broken, the authorities can adjust the payments. For small discrepancies adjustments are seldom required. (Ernst & Young, 2003)

3 Analysis

3.1 Methodology

To illustrate how CCA can act as a tax planning tool, and its effect compared to other structures, the case study methodology has been chosen. The publicly available information on real CCAs is limited, as few jurisdictions collect statistics on infra-firm trade (Lanz & Miroudot, 2011). In Norway, enterprises are not obliged to publish specified information about related-party trade (Balsvik, Jensen, Møen, & Tropina, 2009). Arrangements are private. For this reason, a fictitious case has been created.

A limitation of the case study method is that it is a simplification of the world. Many assumptions have to be made, and many are to a great degree unrealistic. Nonetheless, the main focus of the paper is not the solution of the case, but rather the process of structuring the CCA. By employing a simplified case constructed for this particular purpose, it is less burdensome to place focus on all areas of concern.

The results of the analysis depend on which point of view one takes. Effects can be analyzed from a pure accounting perspective, an investor's perspective or a tax perspective. The calculations will vary. As the objective of this paper is to illustrate tax incentives of employing the CCA structure, the case will be solved with a focus on the tax accounts.

3.2 The case

3.2.1 The pharmaceutical industry

The global pharmaceuticals market is worth US$ 300 billion a year, a figure that WHO expects will rise to US$ 400 billion within three years. The industry is characterized by high market concentration. The ten largest drugs companies control over one-third of the market, several with sales of more than US$ 10 billion a year and profit margins of about 30%. Six of the dominating companies are based in the United States and four in Europe (World Health Organization, 2014). In an industry where R&D is one of the greatest costs and the risk of unsuccessful R&D activity is high, financial strength is a great advantage. In addition to

economies of scale in manufacturing, clinical trials and marketing, financially solid companies can invest in more R&D and diversify more. By diversifying, the company will be more stable over time. (Davidson & Greblov, 2005). On average, it takes about ten to fifteen years for a new medicine to complete the journey from initial discovery to the marketplace (Pharmaceutical Research and Manufacturing of America, 2013).

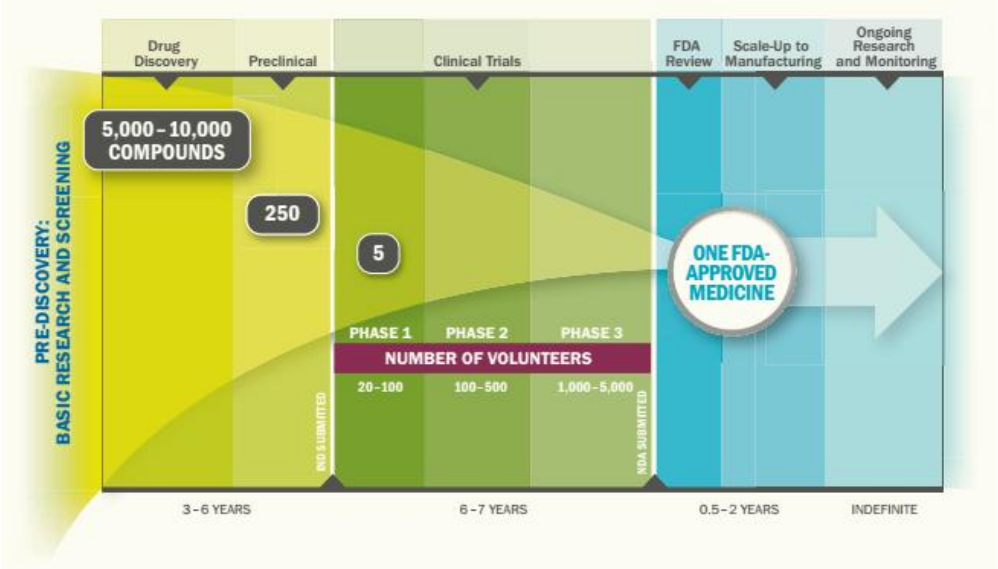


Figure: The research and development process in the pharmaceutical industry (Pharmaceutical Research and Manufacturing of America, 2013)

For every 5,000 to 10,000 compounds that enter the pipeline, only one receives approval. Even medicines that reach clinical trials have only a 16% chance of approval. The process is costly. The average R&D investment for each new medicine is US$ 1.2 billion, including the cost of failures with more recent studies estimating the costs to be even higher. (Pharmaceutical Research and Manufacturing of America, 2013)

3.2.2 The Pharma Group

Our invented multinational enterprise called Pharma is a big-sized pharmaceutical group. The headquarters is located in Norway. The group is highly internationalized with subsidiaries located in 15 countries. Pharma develops, produces and sells pharmaceutical products all over the world. They have R&D centers located in Norway and in the US. Production facilities are situated in Norway, US and Spain. To the remaining market, drugs are exported to local distribution centers where they are packaged and distributed to

pharmacies. Pharma AS is responsible for Northern Europe and Asia, Pharma SL for the rest of Europe, Africa and Latin America, and Pharma Inc. for North America.

In 2005, the Norwegian research center started development of a new medicine against influenza. Tests had shown it to be 50% more effective than existing solutions. They patented the technology immediately. Furthermore, the plan was to introduce the product on the market by 2015 and R&D costs were expected to amount to US$ 1.2bn. Market research confirmed great interest for the product. The drug was expected to become a drug for the masses, a so-called blockbuster drug.

3.2.3 Related-party trade: The basic case

As R&D would take place in Norway and Pharma AS would be the legal owner of the patent, the intangible property must be made available to the wholly owned subsidiaries in Spain and the US. In previous related-party trade, the Pharma group had employed traditional structures; including direct sales and licensing. However, they had become aware that many of their competitors now were employing the CCA structure. The manager had also read that CCAs were tax efficient and thus would improve company results. Pharma was therefore curious to try the CCA structure.

Before starting production, Pharma decided to hire some consultants to advise them on how they should structure the trade. They soon confirmed that the pharmaceutical patent meets the definition of IP both in the US Section 482 regulation and the OECD guidelines chapter VI.

Assumptions:

(1) Sales and direct costs are stable over the life of the patent (after being introduced on the market).
(2) No additional R&D costs would incur after production and sales have begun in Norway and Spain (year 1).
(3) The operating profit margin is the same in all three countries, and is set to the industry average of 45% (Jousma, n.d.). In the US they charge higher prices, but they also have higher direct product costs.

(4) The cost of capital is 11%, which is the industry standard (Jousma, n.d.).
(5) Overhead costs are not considered as the aim is to show the tax effect of using the CCA structure.
(6) Inflation is zero.
(7) To avoid complicating the case, tax treaties are disregarded. Note however, that double taxation thus might seem like a greater issue than it really is.

The budgeted sales are the following:

Participant	Sales income/year	Price/unit	X units
Pharma Inc	1 300 000 000	40	32 500 000
Pharma AS	420 000 000	30	14 000 000
Pharma SL	300 000 000	30	10 000 000

Due to different geographical market and varying industry structures Pharma Inc. can charge higher prices than AS and SL.

Assuming that the firm follows the industry average is an unrealistic assumption. Within an industry, the results may fluctuate widely and so the average does not really provide us with any useful information. However, as there are no alternative values that fit better, the averages are still considered the best approximation for the case. Although assumptions may be naive, they are helpful as to illustrate the issues of current CCA legislation.

Alternatives to CCA

A multinational firm wanting to sell its products globally have different options as to how it chooses to structure the trade.

Direct sales

Producing independently and selling the products directly through exports is the traditional choice. The drug could be exported to the subsidiaries that would act as distribution centers or sold directly to customers. A disadvantage of direct sales is that trade costs would increase significantly. Transporting final goods to the US and Spain might be costly and in addition Pharma will be charged custom duties. Producing all of the medicine in Norway might also become very expensive due to higher labor costs and need for capacity expansion.

Royalties

As Pharma has subsidiaries located abroad, a better option could be to license the intangible property. As with direct sales Pharma AS would have to develop the IP independently and as a result become the sole owner of the patent. An advantage compared to direct sales is that no physical transferal of goods would be necessary. Trade costs could be drastically reduced. The subsidiaries would undertake the production themselves and pay an arm's length royalty rate in return for using the IP. Hence, less income would be transferred across borders, reducing issues of double taxation.

Licensing IP rights to associated parties is very common. If Pharma were to use this structure, the drug would be developed by Pharma AS in Norway and then licensed to the US and Spanish subsidiaries for production and sales here. Pharma Inc. and Pharma SL would pay a royalty fee for using the patented technology. They would start the licensing when the drug is at the end of the clinical development phase, and only production and sales remains before the product can be found in the pharmacies.

Royalties can take the form of up-front payments and milestone payments to be paid during the development and the royalties due once the drug enters the market. However, usually they are expressed as a percentage of sales, and are meant to cover part of the profits generated by the licensee through exploiting the invention (Jousma, n.d.). Thus, when structuring a licensing agreement, Pharma AS would have to set a royalty rate they could charge Pharma Inc. and Pharma SL for exploiting the patent.

Setting the royalty rates

The Norwegian Tax Act § 13-1 requires that Pharma AS complies with the ALP. Further guidance is found in the OECD Guidelines chapter 12. The rates must be set as if set between independent parties. Royalties are not the focus of this paper, and so a detailed analysis will not be undertaken. However, a basic understanding is important.

To comply with the ALP, Pharma AS must expect to generate excess profits from the licensed patent. No independent party would enter into an agreement of licensing if the return on

capital invested would be lower than the cost. When setting the royalty rate, Jousma (n.d.) suggests that the following formula is employed:

Royalty = X * OPM-(Ipvm/Spvm) = X*[OPM- Ipvm/Spvm]

Where OPM = operating profit margin, Spvm = present value of sales, Ipvm = present value of investments and X = distribution factor.

Instead of undertaking a detailed analysis to find the distribution factor (X), one can employ the empirically established 25% rule. This rule states that the licensees profit should be shared on four activities: invention, development, production and sales. The share the licensor is entitled to depend on which of these activities the licensor performs. The licensed technology often also requires that the licensee invests in additional development activities. Thus 25% has become a common distribution factor (Jousma, n.d.). In this case, the licensor also develops the drug. Hence the profit distribution X should be set equal to 50%. Pharma Inc. and SL do not need to make any additional investments in R&D.

In the following, the royalty rate will be expressed as a percentage of sales. As the licensee does not need to make any additional investments, the Ipvm=0 and so the royalty rate can easily be found through the following formula: R = X*OPM = 0.5*0.45 = 22.5 percent.

The direct product costs are the costs that completely can be attributed to the product. These include direct labor and material. The direct costs are assumed equal in Norway and Spain, US$ 16.5 per unit. It is assumed that labor is more expensive in Norway, whereas the material cost more in Spain, so in sum these even out. In the US, direct product costs are assumed to be US$ 20. The projects accounts will be equal all 10 years of the patents life.

Pharma INC	Year 1	**Pharma SL**	Year 1
Expected yearly sales	1 300 000 000	Expected yearly sales	420 000 000
Direct product costs	715 000 000	Direct product costs	231 000 000
OPM, 45%	585 000 000	OPM, 45%	189 000 000
Royalty payments 22,5%	292 500 000	Royalty payments 22,5%	94 500 000
Pre tax profit margin	292 500 000	Pre tax profit margin	94 500 000
- Corporate tax, 35%	102 375 000	- Corporate tax, 30%	28 350 000
- Withholding tax, 30%	87 750 000	- Withholding tax royalties, 24,75%	23 388 750
After tax profits	**102 375 000**	**After tax profits**	**42 761 250**

With royalty payments, the profits transferred are subject to a withholding tax. Pharma Inc. will have to pay a withholding tax on the royalty income generated in the US. For Pharma AS the royalties will be treated as taxable income. Hence, the royalties will be subject to double taxation. Shifting profits from the US to Norway with an aim of saving tax payments come at a cost. Although the tax rate in Norway is 8% lower than in the US, the additional cost of licensing will be greater than the tax reductions generated.

In Spain, the rate for withholding tax is less than the rate for taxation on corporate profits. Consequently, the Spanish entity will be able to partially deduct royalty payments from the tax base. Nevertheless, as in the US, due to withholding tax it is expensive to shift profits to Norway.

In Norway, the royalty income is taxable income. The HQ's tax base can be reduced by depreciating the patent. In general, Norwegian tax law requires that R&D costs are deducted as they incur. Despite this, concrete projects that are or will become assets generating future income can be capitalized, according to the tax law § 6-25. Pharma's patent is an intangible asset, and so they decide to capitalize the cost of development. In order to depreciate the patent, the tax law § 14-50 requires that the value of the patent is limited in time. As a patent has an expiration date, and we have assumed that the value thereafter will deteriorate, this requirement is met. According to § 14-50, in the patent will have to be depreciated linearly. A linear depreciation implies that yearly depreciation in present value is equal to: $1,200,000,000 / 10 years = $120,000,000. Considering this, the yearly accounts of Pharma AS will be the following:

Pharma AS	
Expected yearly sales	300 000 000
Direct product costs	165 000 000
OPM, 45%	135 000 000
Royalty income	387 000 000
Depreciation, IP	120 000 000
Pre tax profit margin	402 000 000
- Corporate tax, 27%	108 540 000
After tax profits	**293 460 000**

If using the royalty structure, the total tax burden for the group would be US$ 350.4 million.

Total taxation, annually	
Taxation US	190 125 000
Taxation Spain	51 738 750
Taxation Norway	108 540 000
Total taxation with royalties	**350 403 750**

Cost Contribution Arrangement

An alternative to licensing is that the medicine is developed by Pharma AS in Norway in cooperation with Pharma Inc. and Pharma SL. The result of the CCA process would be the patent that is expected to create benefits for all of the participants. The CCA must be developed in accordance with the ALP. Hence, Pharma must structure the arrangement in the same way that unrelated parties would. For independent parties to be willing to enter into the CCA, there must be consistency between contributions and expected benefits. No participants should receive a proportionally greater share of the benefits. To make sure the ALP is followed; Pharma must identify the benefits and charge contributions according to how these are shared.

Step 1: Determining the value of total contributions

The first Pharma AS will have to do when developing the CCA is to value all initial contributions. Contributions can come in different shapes and at different points in time. For instance, when setting up the CCA a participant could contribute with pre-existing rights or assets for use in development of new assets. In such a case, the rights or assets contributed would have to be valued and compensated by the other participants. To start with, for the purpose of this paper, it is helpful to assume that all parties contribute solely with cash. This might be an unrealistic assumption as the drug will be developed in the Norwegian R&D facilities of Pharma, however, it is necessary to avoid complicating the basic case.

As no contributions of pre-existing assets has been identified, the next step is to estimate all future costs related to the CCA activity. Pharma will have to identify all relevant costs. The OECD guidelines art. 8.16 requires all contributions made by the participants are recognized, this including property and services that are used partly in the CCA activity and partly in the participants separate business activities. The IRS § 1.482-5(d)(3) goes further, and states that

the relevant costs are all operating expenses, depreciation and amortization of assets, expenses associated with assets used, for instance, leasing expenses. Pharma has estimated that the total cost of producing the drug would be US$ 1.2bn.

Step 2: Determine the allocation

When the total pool of costs has been identified, the expected benefits must be estimated. The total costs of development must be shared between Pharma Inc., SL and AS according to the share of the benefits they expect to receive. Finding expected benefits is not straightforward. The economic life of the expected benefits must be estimated, a measure for the benefits must be identified, and the value found. The allocation of the benefits determines the contribution of each participant. Due to higher tax rates in the US than in Norway and Spain, Pharma has a tax incentive to overestimate the expected benefits of the US entity. Naturally, the tax authorities are of the point of view that tax considerations should not affect the estimation of expected benefits.

The length of the period of estimated benefits

When estimating the benefits from the CCA, it is first necessary to determine the economic life of the drug. This determines the number of years benefits can be received. In the pharmaceutical industry, the technology is normally patented before the product is introduced on the market. It is assumed that Pharma's patent will expire after the product has been 10 years on the market.

This does not necessarily imply that Pharma cannot continue to produce the drug and sell it with a profit. However in the pharmaceutical industry, it is common that drugs are copied shorty after patent has expired. With competition, the profitability drops until margins are completely eroded. Although, an industry trend, it is not certain that this will happen to Pharma's new drug. Pharma might be the exception to the rule. Moreover, the duration of this process may be long, and so Pharma could potentially earn great profits also several years after the patent's expiration. It might also be that elements of the IP could be employed in further R&D activity, e.g. as a platform for future drugs. If this was the case, the CCA activity could indirectly create great benefits also after the expiration of the patent. If the outcome of the CCA activity is an asset with perpetual economic life, estimation of

expected benefits would be more complicated. The benefits would be considered indefinite, but variable. Predicting the future correctly is challenging. Uncertainty is an important element when estimating the economic life of the drug.

To simplify, it is assumed that that Pharma's opportunities for alternative usage of IP assets in the future are limited. Although it might be too simplistic, the economic life of the drug is limited to the life of the patent, i.e. 10 years after being introduced on the market.

Most reliable measure

The OECD and the IRS agrees that there is not one fixed measure that always must be employed for estimation. The measure that most reliably demonstrates the future share of benefits must be chosen. However, which measure that is most reliable may vary greatly from one CCA to another. What further complicates the decision is the fact that the future is unknown, and what is expected to be the most reliable measure today, may not turn out to be so. The choice is based on several elements of uncertainty, hence leaving the MNE with great liberty as to how it chooses the measure. To limit the MNEs ability to set measure freely, the OECD and IRS recommend certain measures. Expected benefits could either be based on anticipated additional income or cost savings arising from the CCA activity, or indirect measures such as allocation keys.

Although some measures are recommended, Pharma can to a great degree choose how they want to measure the expected benefits. As long they can document that the decision is based on what they regard as most reliable, it is difficult for the tax authorities to control whether the expectations were genuine beliefs about the future or based on other considerations. As the measure determines how costs are allocated, tax planning may easily influence the choice. If tax minimization was the ultimate goal, Pharma would prefer the option that would shift most costs to the high-tax jurisdiction(s). If Pharma had a choice between different methods that all could be argued to be the most reliable one, the optimal choice would be the method that allocates a greater share of costs to the US and thereafter Spain.

Cost savings

If Pharma were to base the estimated benefits on cost savings they would have to identify the total pool of cost reductions in comparison to structuring the trade differently among them. A natural comparison would be in the case of royalty payments. Participation in a CCA would imply removal of royalty fees for Pharma SL and Pharma Inc. However, as Pharma AS would not develop the drug without contributions from Pharma Inc. and SL, it might be difficult to argue that looking at removal of royalty fees would be the most reliable measure for calculating expected benefits.

Furthermore, the CCA would reduce costs of acquiring know-how. Pharma Inc. contributes with a team of researchers. This knowledge would otherwise have to be acquired at market prices. Other costs savings are those of economies of scale. There are many examples of costs that could be saved through a CCA. Nevertheless, using costs as a measure could also involve valuation issues. As these savings are just predictions, they are prone to over and underestimation. Moreover, identifying all savings before they incur can challenging.

Additional income

A second option is to consider expected additional income from participation in the CCA. It would be natural to include income from sales, but also other income such as spillover effects from brand building etc. With a new blockbuster drug, the Pharma brand will get a lot of extra publicity which can increase sales also of other drugs.

Using additional income as measure could also be problematic as sales income also is affected by factors outside of the CCA. It might be that the US entity plan to launch a great marketing campaign and that it therefore expects higher sales than if it were to follow the marketing plan of Pharma AS. If a large share of the sales income in fact is a result of this campaign, Pharma Inc. would then be paying a contribution that is disproportionally high compared to benefits received. Differentiating what part of the income that is attributable to the CCA and what part is attributable to other factors is a challenging task, but simply considering the total expected income may be insufficient.

If it is so that the US entity expects an income that, in proportion to the estimated cost savings of the CCA, is much greater than what the entities in Spain and Norway do, then an estimation of benefits based on income would give better results for the Pharma Group. A greater share of the costs would be allocated to the US entity, and as the tax rate in the US is higher, the total tax burden would be reduced.

Indirect measures

In practice, using one of the direct measures mentioned above, might be quite impractical. As these are aggregated measures, they might be difficult to predict reliably. Indirect measures are therefore more commonly applied (Barbenec, 2010). If impossible or impractical to calculate the additional generated income or costs saved directly, Pharma could use an allocation key. Depending on the objectives and circumstances of the CCA, possible allocation keys include sales value, sales volumes, units produced, the number of employees, gross or operating profit, assets, values or capital invested.

The benefits could be estimated according to one of the following methods:

(1) Units produced or sold: This is recommended when each controlled participant is expected to have a similar increase in net profit or decrease in net loss attributable to the exploitation of a unit of the result of the CCA. This requires that units are identifiable and capable of separate use.

(2) Sales: When the benefit is attributable to the increase in profit or decrease in loss from each incoming financial unit, sales could be a suitable indirect basis for measuring benefits. For participants operating at the same market level, selling the same or similar product directly in different geographical markets, sales could be a good indicator of future benefits. However if some participants sell their product through a distributor, the market level would not be the same, and sales would not be a proper measure.

(3) Operating profit: This is generally recommended where the derive results from the CCA is integral to the core business of the participants and has a direct effect of the profitability of the business. This is also a good measure if the participants will derive different profits from the sales.

(4) Other basis: In practice other measures are also employed. What is the proper measure depends on the conditions of the CCA.
(5) General analysis based on valuation of the controlled participants' companies, also called the investor model.

Differences in financial reporting (e.g. revenue recognition) may complicate the measuring of benefits. Ideally, the benefits should be measured based on a single financial reporting basis. However in practice, this is very impracticable. (Barbenec, 2010)

Although Pharma probably could argue for using several of these measures. In the continuation of this case, it is assumed that sales income would be the best measure. The argument is that for Pharma the benefit from the drug is clearly linked to the additional sales income.

Finding the value of Pharma's sales

The value of sales is based on predictions about the future. Due to this element of uncertainty, it is prone to over- and underestimation. The expected value of sales can be read out of the budget. Moreover, the fact that Pharma's entities employ different regulative frameworks for accounting may also affect the income reported. E.g. the IFRS and the US GAAP are different in terms of revenue reporting. To be able to compare the income reported by the different entities, ideally, they would employ a unified financial reporting framework. Due to extra workload, this would be impracticable and an unreasonable requirement.

Finding the shares

In total the medicine will be sold in all countries where Pharma has an establishment. Pharma has estimated that expected income from sales of the drug will be evenly spread over the ten-year period of the patent. According to the budget, sales of the medicine will give Pharma Inc. a yearly income of US$ 1,300m, Pharma SL US$ 420m and Pharma AS US$ 300m. It is assumed that there are no additional income from the results of the CCA.

When we know the yearly income we can easily calculate the expected benefits. If the economic life of the patent would be different across the states, one would have to calculate the present value of the discounted yearly sales income. For discounting the flow of income,

the cost of capital should be employed instead of the entity's internal rate of return (Jousma, n.d.). The reason is that the CCA is considered a separate project with a different risk than the ordinary operations of the enterprise. The CCA involves production of an intangible asset, thus the risk must be considered higher than the normal enterprise risk, which should be reflected in the discount rate. In the pharmacy industry the average cost of capital employed is 11%.

The discount rate is set by Pharma itself. Thus, the rate is prone to manipulation. A higher discount rate will result in reduced present benefits. In this case, the expected sales are constant for all participants and so long as the same discount rate is employed, this will not affect the shares. However, if Pharma AS expected sales would grow over times, whereas the others did not, a higher discount rate would result in Pharma AS being allocated less costs than what they rightly should.

In this case the sales are constant over the economic life of the asset, and as the same discount rate is employed on all participant's contributions, there is no need in discounting the future sales to find the allocation key. The respective shares would be the same regardless. The allocation of contribution would then be based upon the share of total sales income each participants receive:

Distribution of benefits	Sales income	Share of total
Pharma Inc	13 000 000 000	64 %
Pharma SL	4 200 000 000	21 %
Pharma AS	3 000 000 000	15 %
Total	**20 200 000 000**	**100 %**

As the medicine is more costly in the US, this measure imply a that a greater share of expected benefits will be measured in the US than if the measure was number of units. If the number of units sold was to be the benchmark, the allocation would be the following:

Distribution of benefits	Number of units	Share of total
Pharma Inc	32 500 000	58 %
Pharma SL	14 000 000	25 %
Pharma AS	10 000 000	18 %
Total	**56 500 000**	**100 %**

From the two different allocation keys, we clearly see that sales income will shift a greater share of the costs to Pharma Inc. The tax effect of this decision can be illustrated through comparing the resulting tax deduction of the two allocation measures:

Allocation key	Units			Sales income		
Distribution of costs	**Share of costs**	**Yearly contributions**	**Tax deduction**	**Share of costs**	**Yearly contributions**	**Tax deduction**
Pharma Inc	58 %	69 026 549	24 159 292	64 %	77 227 723	27 029 703
Pharma Sl	25 %	29 734 513	8 920 354	21 %	24 950 495	7 485 149
Pharma AS	18 %	21 238 938	5 734 513	15 %	17 821 782	4 811 881
Total	**100 %**	**120 000 000**	**38 814 159**	**100 %**	**120 000 000**	**39 326 733**

This illustrates the importance of what measure is applied. The yearly difference between the tax deductions of the two measures is approximately US$ 510 000. In ten years that will amount to US$ 5.1 million.

Employing operating profits does not make much sense as the link between the product and the entities total profits is likely to be vague. As a great pharmaceutical group, the entities do produce and sell many different drugs and so the final profits do not reflect the benefits each derive from selling the influenza medicine. The investor model could also be employed, though this would require that Pharma calculated the NPV of the investment in the drug for the entities. This process requires more work. If taxes are not taken into account, the resulting allocation key would be similar to when using sales income as measure. This is due to the fact that the operating profit margins are the same across the entities.

With sales income as measure, if we transfer these costs to the accounts of the parties, the yearly tax accounts of the project will look the following:

Pharma Inc		**Pharma SL**	
Expected yearly sales	1 300 000 000	Expected yearly sales	420 000 000
Direct product costs	715 000 000	Direct product costs	231 000 000
OPM, 45%	585 000 000	OPM, 45%	189 000 000
Contribution payments	77 227 723	Contribution payments	24 950 495
Pre tax profit margin	507 772 277	Pre tax profit margin	164 049 505
- Corporate tax, 35%	177 720 297	- Corporate tax, 30%	49 214 851
After tax profits	**330 051 980**	**After tax profits**	**114 834 653**

In contrast to royalties, contributions do not represent any income for the receiver. The OECD Guidelines art. 8.23 emphasizes that contributions should not constitute any royalty payment. Contributions should be treated in the same manner as if they were given to an external party performing the CCA activity. Whether the contributions are tax deductible depends on the nature of the contribution. Contributions received are simply seen as a reimbursement of costs and is therefore not taxable income.

In the CCA of the Pharma group the participants have agreed that all will gain their own right to produce the medicine. The tax base of Pharma AS is thus smaller than with royalties.

Pharma AS	
Expected yearly sales	300 000 000
Direct product costs	165 000 000
OPM, 45%	135 000 000
Contribution payments	17 821 782
Pre tax profit margin	117 178 218
- Corporate tax, 27%	31 638 119
After tax profits	**85 540 099**

Based on the assumptions and calculations from above, the total taxation on group level will be the following:

Total taxation, annually	
Taxation US	177 720 297
Taxation Spain	49 214 851
Taxation Norway	31 638 119
Total taxation	**258 573 267**

Finally it is important to note that many of these calculations are based on uncertain estimates and that the solution easily could have been very different. There is not one correct answer as to how such a situation should be solved.

Comparing the CCA with the alternatives

On group level, there is a significant reduction in tax liability when employing CCA instead of royalties. The decrease is due to two reasons: (1) contributions from Pharma Inc. and Pharma SL are not subject to withholding taxes, and (2) contributions to the CCA are not taxable income in the country of development in contrast to royalties which are reported as income. In comparison with royalties, the CCA structure reduces the Pharma group's overall tax liability.

Total taxation, annually	**Royalties**	**Cost Contribution**	**R-CCA**
Taxation US	190 125 000	177 720 297	12 404 703
Taxation Spain	51 738 750	49 214 851	2 523 899
Taxation Norway	108 540 000	31 638 119	76 901 881
Total taxation, yearly	**350 403 750**	**258 573 267**	**91 830 483**

Moreover, the CCA activity is located in Norway, the low-tax jurisdiction. As tax planning strategies usually imply transferring profits to the low-tax jurisdiction, one would expect that replacing royalty fees with cost contributions would not be beneficial. If the Pharma AS rather charged the US entity royalty fees, a greater share of the profits would be shifted to the low-tax country. Royalty fees are always greater than cost contributions as a profit element must be included in the fee calculated. The results would also depend on the royalty set.

When we in spite of this still see that CCA result in tax reductions, the reason is elimination of withholding tax in Spain and the US in addition to taxation of royalty income in Norway. If the CCA was located in the US the incentive for employing the CCA structure would be even greater.

This basic case illustrates that the flexibility of the regulation enables CCA to act as a tax planning tool in related-party trade.

Contribution of pre-existing assets to the CCA

All contributions should be taken into account, also contributions such as tangible and intangible assets and contributions made in-kind. If a party contributes with all the know-

how, this should be reflected in the contributions. But how do you really put a price tag on the know-how contributed? Or utilization of an existing patent?

Valuation of initial contributions

As mentioned in the basic case, the first Pharma AS will have to do when developing the CCA is to value all initial contributions of pre-existing assets. All contributions in the form of cash, services, tangible property and intangible property should be accounted for in the pool of costs.

The initial contributions should be compensated through balancing payments. Pharma AS contributes with tangible assets such as research equipment they already possess. This equipment is also employed in other R&D projects. Pharma Inc. has a great research lab in the US and wish to contribute with some of its assets. It will contribute with a patented technology for a research device that dramatically would improve the R&D process. In addition it has highly skilled researchers. A team is sent to Norway to partake in the process. The Spanish subsidiary do not contribute with any pre-existing assets.

The valuation of the contributions must be done on a consistent basis. The US requires that contributions are valued at cost, while the OECD leaves the question up to the respective jurisdiction to decide. Norway and Spain bases the valuation on the ALP, which often signify market value. When jurisdictions employ different valuation techniques, the process gets more complicated.

Team of researchers

The value of the team of researcher must be estimated. In the US, the valuation of workforce contributed is a hotly debated topic (Heriford, Keates, Lamoureux, & Wright, 2013). First, one could argue that the contribution would simply be the people; the flesh-and-blood individuals. If this was so, the contribution could be considered a tangible asset. However, in a technology intensive industry it is not the employees that are the assets, it is rather their skills. As the case states, these workers are highly skilled and bring a great pool of knowledge with them. The research team would therefore be considered intangible assets. The “commitment” of a research team’s “experience and expertise” to intangible

development under the CCA can be considered as a platform contribution. However, the salaries of the research team can also represent an ongoing operating contribution.

The OECD does not provide any concrete guidelines for how Pharma should value contributions. It should be determined on a case-to-case basis, where the determining factor should be what would have been done in an uncontrolled transaction. IRS on the other hand, has pushed for IP being valued according to one of two techniques (Peters, Preshaw, & Luquet, 2004):

(1) The investor model: Setting the value of the research team equal to the net present value of all future residual profits, even when these are being generated by intangibles that clearly have been developed under the R&D CCA; and
(2) The acquisition model: Using market capitalization and market acquisition values to determine the value of the buy-in of the team. In some cases this value may significantly exceed the NPV of future profits and in effect this will imply allocating more than 100% of profits to the original IP owner.

To ensure consistency with the ALP, the decision must be based on what best reflects the real value of the contribution. As the link between the present value of future net profits and the contribution of the know-how of the researchers may be ambiguous, using the investor model seems unreasonable. If valuation was to be based on market acquisition, it would be necessary to find the market price of engaging a comparable team of researchers. When finding a team to compare with, the market of comparison must be chosen. Prices vary, depending on the market of consideration. Thus there might be great disparity between market value and costs. Salaries in Norway and the US differ widely. So does taxes and benefits, which is a part of the cost of employment. One could argue that a comparable team should be found in Norway as Pharma AS is located here and that they alternatively would hire researchers in Norway. But as the team is American, one could also argue that the comparable team should be so. On the other hand, acquiring an American team independently could be challenging. There might be structural barriers.

In general, finding a comparable team might be difficult as the researchers have acquired a lot of company and industry specific knowledge. Simply looking at the cost of having a

similar team employed may also be insufficient. The value of the know-how is not always reflected in the salaries, as the entity additionally may have incurred great training costs. If we assume that their salary reflects the value of their knowledge, the cost of having the researchers employed on the project could be a good estimate for the value of the contribution. A weakness of such a strategy is that the value of the know-how is not always reflected in the salaries, as the entity additionally may have incurred great training costs. Yet, Pharma decides to use total cost of having current team employed, including benefits and taxes, as an estimate of the contribution.

Plant and equipment

The contribution of Pharma AS would have to be valued in accordance with the ALP. For Pharma SL and AS, the determining factor would be what an independent third party would pay for the equipment and the plant. The contribution of the plant and equipment could be viewed as a platform contribution, a lump sum payment paid as if the assets were bought by the CCA, or as an operating contribution, in the form of alternative rent of plant and equipment. A third alternative would be that Pharma AS was compensated partially for a platform contribution and partially or an operating contribution. However, if the parties were independent, and the plant and property were used partially in the CCA activity and partially in the separate business activity of Pharma AS, it is likely to assume that Pharma would charge a rent for letting others employ their assets.

When the nature of the contributed pre-existing asset has been defined, the next would be to find the value of this contribution. Market prices or prices of comparable transaction are good estimates for the AL price. Even if there were no identical plants to compare with, one could estimate a value based on the prices of similar ones. Unfortunately uncertainty cannot be eliminated completely.

An independent participant would be willing to pay a rent that covered the cost of the owner plus a markup. If a comparable arrangement between independent parties can be identified, its price should be used as an example. Finding an arrangement that has the same term and circumstances might be impossible. A solution could be to see what the regular markup for rental of equipment and plant is, and add this to the identified costs. Therefore,

Pharma AS's costs must be identified. As it is assumed that the equipment partially is being used in CCA activity and partially in separate business activity, it is useful to identify the proportion of total capacity the project utilizes. If capacity is measured by hours, the number of hours the CCA utilizes must be found. A weakness of such a measure is that the number of hours attributable to the CCA activity could easily be over- or underestimated, as it is difficult to control for external parties.

Patent for new research device

When Pharma Inc. contributes with a patent to the CCA, it will have to decide what rights the other participants will be given in relation to this. The question is whether the actual rights transferred should be make and sell rights or use rights. Both allow Pharma AS to manufacture and sell the R&D device, however the use rights in additionally allows Pharma AS to use the patent to conduct future R&D (Heriford, Keates, Lamoureux, & Wright, 2013).

For Pharma this distinction is important to make as the amortization and thereby the value of the contribution depends on the economic life of the pre-existing intangible property. Make and sell rights can be valued by applying comparable license arrangements in which royalties are typically paid up to the point that the patent expires. The use rights on the other hand is typically seen to have perpetual economic life as they represent a platform of IP knowledge that makes future R&D more efficient and effective (Heriford, Keates, Lamoureux, & Wright, 2013).

According to the US, the valuation of the contribution must be based on accounting costs. For the patent, the cost would be the amortization cost of the patent. The US, Section 197 of the Internal Revenue Code requires that intangible assets are amortized over 15 years. If the IP contributed is created by the contributor itself however, Section 174 requires it to be amortized over 60 months or more. However, if the patent also is employed in R&D activities separate from the CCA, this must be taken into account. The CCA cannot be expected to cover the entire amortization cost. Pharma must find a method to share the amortization costs on the various users of the technology.

The period of amortization vary between different countries. In Spain, the amortization depends on the useful life of the intangible asset[7]. For both intangible assets with indefinite useful life and with a defined, the amortization is limited to 10 percent of its value. In Norway, an IP which is a right with limited life, should be depreciated linearly over its life[8]. If the asset does not have a set time limit, the determining factor is whether the IP has limited economic life. If the tax payer can prove the limited life, then it can be depreciated over the life of the asset, acc. the Norwegian tax law § 6-1. If it has perpetual economic life it can only be amortized if tax payer can illustrate the value is decreasing. The fact that jurisdictions differs greatly in amortization of IP illustrates that although all contributions are valued on a cost basis, the valuation may differ greatly. Thus, achieving complete consistency in valuation is hardly realistic.

When pre-existing assets contributed have been valued, Pharma will continue as in the basic case with finding the total pool of contributions to be covered by the CCA. For Pharma, relevant costs would be depreciation of plant and equipment, maintenance of equipment, salaries to staff and other operating costs. Pharma will have to estimate the length of the period of the expected benefits, decide what measure it considers to be the most reliable measure and finally calculate the value of the benefits. When benefits have been found, shares can easily be estimated. And so balancing payments can be set.

3.2.4 CCA entry

Pharma Inc. and Pharma AS started the CCA activity without the participation of Pharma SL. After 5 years of production, Pharma SL decides to join the arrangement. Pharma Inc. and AS estimated that they had performed about half of the R&D activities they would need before product would be ready for sales.

In order for Pharma SL to enter the CCA it has to have expectations of receiving benefits from participation. No independent party would enter into an arrangement if there were no prospects of benefits. Fortunately, Pharma SL has identified a great interest for the drug in

[7] Articles 11[1] and 12[2] of the Real Decreto Legislativo 4/2004 of March 5 2004
[8] The Norwegian General Tax Act §14-50

its markets and is expected to generate great income. Thus the arrangement has economic substance.

After confirming substance, the parties would have to estimate the buy-in price Pharma SL should be charged for entry. When Pharma SL enters the CCA arrangement it will obtain an interest in results of prior CCA activity. This could be intangible property developed through the CCA, work in-progress and knowledge obtained from past CCA activities. In effect, the existing participants transfer part of their respective interests to Pharma SL. Accordingly, the new participant would have to make a buy-in payment as a compensation for the transfer. On the other hand, if the results of past CCA activity are of no value, then no buy-in should be required. Consequently, the parties would have to value results of prior CCA activity and pre-existing assets. The compensation must be set based on arm's length value. The fundamental question is whether earlier CCA activity has generated any results. An element of discussion is whether failed R&D activity should be reimbursed. If the results of the R&D so far only are rejected trials, it might be difficult for Pharma AS and Inc. to argue that the buy-in of Pharma SL also should cover their failures.

Nevertheless, the results of past CCA activity may have value even if regarded as failed R&D. Know-how gained through failures may have value for future R&D. Discovering what does not work is often an important step in the process of learning what actually does. For every successfully developed pharmaceutical drug there are typically thousands of unsuccessful experiments on various compounds. Where past CCA activity is failed R&D, it will have no value only if there is no knowledge or other benefit obtained that is expected to have value for any future R&D activity (Australian Taxation Office, 2004). If Pharma argues that the failed R&D has provided the researchers with know-how needed to develop the final product, a portion of the prior R&D costs should be reimbursed. It is difficult for the tax administrators to control that the valuation of prior R&D is made in good faith, and so there is great potential for value being over- or underestimated.

Valuing previous CCA activity and a partially developed pharmaceutical can be challenging. It may not always be possible or practicable to accurately and reliably estimate the market

value of the results of past CCA activity for these purposes. Most likely there are no comparable assets nor market values to base the valuation upon.

The effect on taxation

The US and the Norwegian entity have shared CCA costs equally between them up until this point. Half of the reimbursement would therefore be paid to the US entity where it would imply a tax increase of 35%*Payment, and the second half would be paid to the entity located in Norway, where it would increase tax payments by 27%*Payment.

By assuming that the R&D costs are evenly spread over the ten years of development, and that all prior R&D will generate future benefits, the rightful buy-in would be 1/3 of the $600 million previously spent on R&D. Each party will be reimbursed $100m each. The overall tax effect can then be found:

Reimbursement	
Buy-in payment	200 000 000
Tax effects:	
Tax US, 35%	35 000 000
Tax Norway, 27%	27 000 000
Tax Spain, 30%	-60 000 000
Change in overall tax liability	**2 000 000**

Through a decrease in tax deductible costs, the US entity would increase its tax liability. The same would happen with Pharma AS. In Spain however, the buy-in would be tax deductible and so Pharma SL would be able to reduce tax payments by US$ 60m. The total effect on the group would be an increase in the overall tax burden. By underestimating the value of prior CCA activities, the Pharma group could reduce taxes payable. This illustrates why buy-ins are subject to great scrutiny from tax administrators.

3.2.5 One party decides to leave the CCA

Let us go back to the basic case. All three participants join the CCA in 2005. However, after 3 years, the US entity decides to withdraw from the arrangement. They argue that Pharma Inc. has discovered a new drug they believe have more market potential and that they don't

have the resources to participate in the CCA too. Their expected benefits of CCA participation seems to have been deteriorated.

With withdrawal Pharma Inc. leaves its interest in the past CCA activity to the other participants. This include intangible property that the CCA already had developed, work-in-process activities and the knowledge that the participant has obtained from the CCA's past activities. The OECD art. 8.34 states that the party withdrawing must be compensated for its interest. If previous CCA activity is of no value however, there should be no buy-out payments.

The buy-out payment should be set under the ALP and the perspective of the remaining participants, Pharma AS and SL, should be considered[9]. If the withdrawal of Pharma Inc. results in an identifiable and quantifiable reduction in the value of the continuing CCA activity a buy-out payment would not be appropriate.

No property to be transferred

If the previous R&D failures cannot be seen to have provided any new knowledge that can be advantageous in terms of future R&D activities, Pharma Inc. cannot expect to receive a buy-out payment. In an uncontrolled transaction, naturally no buy-out would be paid if there were no value to be transferred.

Property to be transferred

Pharma Inc., SL and AS have created the drug and performed successful testing. The technology has been patented. The prior CCA activity certainly is valuable. When leaving the CCA, Pharma Inc. should be compensated.

First, a valuation of the property transferred must be undertaken. As mentioned in the case of buy-in payments, valuing previous R&D failures is problematic. Tax concerns may lead to over- and underestimation of the value. For the tax authorities it is difficult to prove bad faith in estimation. Thus, if Pharma's objective was to minimize overall tax liability, they

[9] OECD Transfer Pricing Guidelines art. 8.35

would try to transfer profits from the high-taxed entity in the US to the low-taxed entity in Norway. This could be achieved through understating previous CCA activity.

Although past CCA activity is considered of value, the withdrawal of the US entity may affect the value negatively. The importance of the departing participant to the CCA may signify that the new interests of the remaining participants in the results of the CCA activity are of lesser value than their former interests. For instance, the absence of contributions to future CCA activity that the departing participant otherwise would have made (e.g. highly skilled technical staff) may adversely affect the completion, and hence the value of work in progress at the time of withdrawal. If the withdrawal of a participant harm a remaining participant by reducing the value of its interest, the terms of a CCA between independent parties might be expected to call for a payment from the departing participant to the remaining participant. (Australian Taxation Office, 2004). This must also be accounted for.

When Pharma Inc. leaves the CCA, it may give up any interest in the results of CCA activity performed after its withdrawal. However, it may agree with the remaining participants to retain some or all of its interest in the results of past CCA activity. Pharma Inc. may be able to exploit that interest, without needing any interest in the results of CCA activity performed after its withdrawal. Where it retains its interest it may later exploit that interest without payment to the remaining participants. For instance, it may exploit its rights under the CCA to use information, know-how or other intangible property resulting from past CCA activity without payment of a royalty to the remaining participants. In this case there is no buy-out payment to the departing participant in respect of such rights (Australian Taxation Office, 2004).

As a matter of commercial reality, whether Pharma Inc. were to use its knowledge resulting from past CCA activity is something that the remaining participants may have little ability to deny or verify. This may particularly be so with regard to legally unprotected know-how. Given this, independent parties might ordinarily be expected to agree that the departing participant has retained its interest in and rights to use such knowledge, so that no buy-out payment in respect of it is warranted. (Australian Taxation Office, 2004)

4 Results

4.1 CSA as an efficient tax planning tool?

As the analysis shows, compared to licensing, the CCA structure can be beneficial for tax purposes. The benefits of the CCA structure stems mainly from the fact that market prices are replaced by costs, but also from elimination of withholding taxes.

A structure of internal trade through direct sales has not been compared to the CCA structure in this thesis. The reason is that production in one state with direct sales to the others is different in nature. As production would be centralized in the country of development, the cost structures of the entities would differ from in a CCA. In addition, trade costs would be greater due to physical transferal of goods across borders. As a different cost structure affect the tax base, comparison is difficult when this effect is unknown.

As previously mentioned, the analysis shows that the CCA can be a tax efficient structure, but this does depend on a set of variables. The respective tax systems of the jurisdictions involved and the structure of the arrangement play an important part when determining what structure that is most beneficial. If R&D takes place in the high-tax jurisdiction a CCA would usually be advantageous as royalty payments including a markup are replaced by costs. The group as a whole would want to limit profits from shifting to the jurisdiction that taxes corporate profits the most. In contrast, if R&D is situated in the low-tax jurisdiction, the decision depends on how royalties are treated for tax purposes. The question is whether the jurisdictions impose taxation on royalty income and whether royalty payments are tax-deductible.

It is also important to note that the comparison of licensing and CCA is heavily reliant on the royalty rate set. One should therefore not put too much emphasis on the final values in the analysis, but rather the process. The important point is what the analysis tells us about employing the two structures in tax planning. The analysis shows is that the CCA structure relies heavily on estimates, predictions about the future and valuation techniques chosen.

To a certain degree, so does the licensing structure, though not to the same extent. Valuation issues in licensing are related to the process of setting the royalty fee. As licensing has become very common, techniques for setting an arm's length royalty rate have been developed and liberty has been limited. Furthermore there are many prior arrangements one can compare with. This hinders the firm from setting a highly divergent rate.

There is less experience with CCAs. Previously their occurrence were usually limited to certain industries. This makes CCAs less of a subject to comparison. Each CCA must be evaluated on a case-by-case basis. The analysis shows that there are many valuation issues and elements prone to manipulation.

First, when identifying and valuing contributions there are several issues that arises. Valuing contributions can be troublesome due to differing domestic regulation and practice as to what method to employ. In the US contributions should be valued at cost, while the OECD recommends the ALP, which usually imply a market based valuation. At the same time, regulation recommends consistency in valuation. If the concern for domestic regulation conflicts with the consistency principle, the process gets more complex. Contribution of intangibles is the most sensitive part of a valuation. Valuing contributions made in kind such as know-how can be very difficult, and thus easy to over- or underestimate.

Second, estimation of expected benefits is another trouble area. The economic life of the asset being developed must be found. As this is based on predications about the future, it is prone to manipulation. The allocation of the expected benefits depends on what measure the participants argue is most relevant. Both indirect and direct measures can be chosen, and the method will further determine the allocation of cost and tax bases. The same accounts for the amount of expected benefits, which depends on what values the participants expect the measure to take. Furthermore, the valuation of expected benefits depends on the discount rate. As expected benefits should be discounted to present values, the rate the MNE deems to be correct can affect the final allocation.

A third issue is related to restructuring a CCA. For buy-in and buy-out payments the value of previous R&D activities will have to be estimated. The future benefit of prior R&D is an

uncertain amount. It is also difficult to control in retrospect. Attributing future benefits to different elements in the total R&D process is a complicated task. For buy-outs another issue is which rights the departing participants gets. The buy-out price must consider whether the participant will be using prior knowledge and technology developed in separate business activities. It is difficult to control whether knowledge from the CCA actually has been employed or not.

All of the issues mentioned, permits CCAs to be employed as a tax planning tools. By over and underestimating the value of contributions and expected benefits, the CCA can be structured as to shift profits to low-tax jurisdictions. What the analysis shows is that there is a great freedom of choice when structuring CCAs. Thus MNEs may be tempted to structure CCAs in a more tax efficient way.

The fact that each case must be viewed in isolation from other cases makes the process of controlling CCAs an expensive and time consuming task for the tax authorities. Furthermore, it is difficult to prove that assumptions about the future were estimated in bad faith. If the outcomes differ from predictions, it is difficult to prove it is due to a tax minimization strategy. Thus, the tax administrators have limited ability of sanctioning MNEs for manipulating estimates.

In Spain, the CCAs have been given little attention. This even though CCAs are rather common. This is disturbing as the analysis shows that the CCA structure offers various options for aggressive tax planning. The participants has to make many assumptions about the future when setting up a CCA, and for the tax authorities it is difficult to prove that these assumptions were made in bad faith and as a part of a tax minimization strategy.

The analysis shows why tax administrators should place more focus on the CCA structure. Perhaps should emphasis be put on developing a uniform international framework, creating better procedures for controlling CCAs, or limit choices in valuation? An international standard could solve issues that arise from differing regulation across states, but would be challenging as it requires international cooperation and compliance. Simpler procedures for controlling CCAs could deter more firms from misusing the structure as risk of being

sanctioned would increase. Limiting the MNEs choices in valuation might also be fruitful, but difficult as previously allowed alternatives must be banned. In conclusion, in order to recommend exact measures to be taken, more work is needed. Thus only a general recommendation can be given: tax authorities should place more focus on researching and improving the CCA framework.

4.2 Implication for managerial control

Tax management has changed drastically over the last decades. Previously taxes were seen as fixed costs of doing business, and tax rates imposed where taken as given. With increased international trade, however, MNEs have realized that the way trade is structured may have great implications for the total tax burden. Taxes are often seen as a regular costs and as cost accountants aim at maximizing firm value, reducing taxes is a common focus. Profitability may also be the basis upon which a bonus is paid. The managers may therefore have personal incentives for implementing tax planning.

For a large multinational group, generating yearly profits worth millions of dollars, an effective tax of 5% on corporate profits instead of 27% implies great savings. Domestic companies do not have this opportunity. Hence, tax planning favor MNEs by providing them with a competitive advantage. This may encourage managers to establish entities abroad sooner than what they otherwise would have and thereby contributes to greater international capital flows.

4.3 Where are we heading?

As already mentioned, international trade has increased rapidly the last decade. Global value chains have grown more common and related-party trade correspondingly. Multinationals with entities in many different locations are seeing the value of cooperation across borders. In 2009, intra-firm trade represented as much as 48% of imports and 30% of exports in the US (Lanz & Miroudot, 2011). In 2011, the European Commission estimated that as much as two-thirds of all transactions were between related parties (Lanz & Miroudot, 2011). The last decades this trade has only increased, and we have no reason to believe that this pattern will change.

As MNEs are outsourcing a greater number of business functions than ever before, the potential benefits of tax planning are increasing. With a higher volume of related-party transactions, the way the entity chooses to structure these transactions will have greater impact on total profitability. Therefore more emphasis will be put on having tax efficient structures.

Tax planning is gaining increased media coverage. The public's condemnation of tax planning can act as an additional barrier for firms considering tax planning strategies. MNEs that value a good reputation and want to be perceived as a social responsible firm, may thus avoid tax planning. The firm's reputation is more important than the potential tax savings. However, increased awareness of the opportunities that exist and the number of firms utilizing tax planning, can also encourage new MNEs to join the "game". As strategic tax planning is becoming normal, it is gaining accept in the business world. Which effect the increased media coverage will have, remains to be seen.

The international community is currently putting great emphasis on the issue of tax planning and base erosion. In the BEPS report from 2013, the OECD announced there is a need for change. The existing systems for international taxation are not sufficient (OECD, 2013a). Although the CCA structure is a part of this issue, it has not been the main focus of this work. The royalty structure has been subject to more criticism and scrutiny. The amount of attention it has been given, may decrease its attractiveness. MNEs may want to avoid to employ the structure. Knowledge and technology are assets which are increasingly being traded internationally (Kleinert, 2004). If royalties are considered unappealing, MNEs will search for alternative ways to structure related-party trade of these assets.

A CCA might be the solution for many MNEs. Existing CCA legislation relies on the ALP, this although it often is difficult to find AL prices for transfers of knowledge and technology. This makes CCA an attractive tax planning tool. Moreover, reviewing consistency with the ALP or proving that estimation has been done with bad faith are great challenges for the tax authorities.

There is an urgent need for changes in international tax legislation. And I do believe change will come. However, how the OECD and the international community decides to solve issues of tax planning is difficult to predict. As some countries actually benefit from the current situation, not all will applaud a reform. In addition, many MNEs have substantial political power and influence. This, they might use to oppose changes. For MNEs that have spent vast amounts on structuring arrangement in a tax efficient manner, clearly changes legislative changes are unattractive. As CCAs tax planning features gives the MNEs a competitive advantage over domestic firms, they will resist loosing this.

The increasing popularity of CCAs can be because they simplify cooperation across borders, but can also be due to its role as a tax planning tool. CCAs are advantageous for several reasons, and as more firms are realizing the benefits of the structure I believe CCAs only will become more prevalent. This, until legislative reforms reduce its attractiveness.

As has been commented numerous times throughout this thesis, the future is uncertain and difficult to predict. I do however believe the work on base erosion eventually will bear fruits, and that the legislators also will realize the need for a more exhaustive regulation of cost contribution arrangements.

5 Concluding remarks

The focus of this thesis is Cost Contribution Arrangements as a tool in tax planning. The aim has been to illustrate how current legislation facilitates the use of CCAs in strategic tax planning. The paper shows that the structure of the CCA depends on a great set of decisions and uncertain estimates. In a CCA the final allocation of costs rests on the valuation of contributions, expected benefits, buy-ins and buy-outs. These are all are prone to manipulation. Their nature allows for over- and underestimation.

Furthermore, it can be a difficult task for the tax administrators to control consistency with the Arm's Length Principle. As each CCA is assessed on a case-by-case basis, the process is both costly and complicated. Proving that estimation has been done in bad faith is challenging, and so the risk of being sanctioned is limited.

As the paper demonstrates, current legislation does not sufficiently address the CCA structure. Due to an increase in global value chains and transfers of knowledge and technology, it is probable that the structure only will become more common. I believe the tax authorities should take a proactive approach and focus on improving the CCA framework before it becomes a severe problem. More focus and research on the topic is therefore considered necessary.

6 Literature

Australian Taxation Office. (2004, January 21). *Income tax: international transfer pricing - cost contribution arrangements.* Retrieved from Taxation ruling: http://law.ato.gov.au/pdf/pbr/tr2004-001.pdf

Balsvik, R., Jensen, S., Møen, J., & Tropina, J. (2009). *Kunnskapsstatus for hva økonomisk forskning har avdekket om flernasjonale selskapers internprising i Norge.* Bergen: SAMFUNNS- OG NÆRINGSLIVSFORSKNING AS.

Barbenec, T. (2010). Certain Important Aspects of Cost Contribution Arrangements in Financial Management. *World Academy of Science, Engineering and Technology*. Retrieved August 7, 2013, from http://www.waset.org/journals/waset/v43/v43-167.pdf

Barford, V. &. (2013, May 21). Google, Amazon, Starbucks: The rise of 'tax shaming'. *BBC News Magazine*. Retrieved August 9, 2013, from http://www.bbc.co.uk/news/magazine-20560359

Bjerke, J. M. (1997). *Internprising.* Oslo: Tano Aschehoug.

Brudvik, A. J. (2013). *Skatterett.* Oslo: Cappelen Damm Akademisk.

Commerce Clearing House. (1988). *Standard federal tax reporter.* Chicago: CCH Inc.

Davidson, L., & Greblov, G. (2005). *The Pharmaceutical industry in the Global Economy.* Bloomington, Indiana: Indiana University Kelley School of Business.

Deloitte. (2012). *2012 Global Transfer Pricing Country Guide.* Deloitte.

Deloitte. (2012b). *International tax: Spain Highlights 2012.* Retrieved from Deloitte: http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Tax/Taxation%20and%20Investment%20Guides/2012/dttl_tax_highlight_2012_Spain.pdf

Deloitte. (2013a). *International Tax: United States Highlights 2013.* Retrieved from Deloitte: http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Tax/Taxation%20and%20Investment%20Guides/2013/dttl_tax_highlight_2013_United%20States.pdf

Deloitte. (2013b). *International tax: Norway Highlights 2013.* Retrieved from Deloitte: http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Tax/Taxation%20and%20Investment%20Guides/2013/dttl_tax_highlight_2013_Norway.pdf

Eden, L. (2001). *International Taxation, Transfer Pricing and the Multinational Enterprise.* Oxford: Oxford University Press.

Ernst & Young. (2003). *Cost Contribution Agreements.* London: Ernst & Young.

EU Joint Transfer Pricing Forum. (2012). *Report on Cost Contribution Arrangements on Services not creating Intangible Property.* Brussels: European Commission.

European Commision. (2011). *Transfer Pricing and Development Countries.* Retrieved from http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/transfer_pricing_dev_countries.pdf

Fallan, L. (2011). *Økonomisk, skatter og verdsettelse. Et kontraperspektiv.* Oslo: Gyldendal Norsk Forlag.

Finansdepartementet. (2014, February 13). *Finansdepartementet.* Retrieved April 8, 2014, from Regjeringen: http://www.regjeringen.no/nb/dep/fin/tema/skatter_og_avgifter/skattesatser-2014.html?id=748052

Heriford, B., Keates, H. A., Lamoureux, H., & Wright, D. R. (2013). *US Cost Sharing: Current Issues and Court Cases.* Denver, Colorado: International Transfer Pricing Journal.

HM Revenue and Customs. (2013). *INTM421090 - Transfer pricing: Methodologies: OECD Guidelines: Cost contribution arrangements.* Retrieved October 29, 2013, from HM Revenue and Customs: http://www.hmrc.gov.uk/manuals/intmanual/intm421090.htm

Holmes, K., & Holmes, C. (2005). *Cost Contribution Arrangements China and International Best Practice.* Wellington: Victoria University of Wellington .

Jousma, H. (n.d.). *Considering Pharmaceutical Royalties.* Leiden: Universiteit Leiden.

Kleinert, J. (2004). *The Role of Multinational Enterprises in Globalization.* Kiel: Springer-Verlag.

Lanz, R., & Miroudot, S. (2011). Intra-Firm Trade: Patterns, Determinants and Policy Implications. *OECD Trade Policy Papers, No.114*.

Leibowicz, B. (2013, March 1). *Cross-Border Taxation.* Retrieved from AICPA: http://www.aicpa.org/publications/taxadviser/2013/march/pages/leibowicz_mar2013.aspx

OECD. (2010a). *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2010.* OECD Publishing. doi:10.1787/tpg-2010-en

OECD. (2010b). *Model Tax Convention on Income and on Capital 2010: Full version.* OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264175181-en

OECD. (2013a, February 12). *Addressing Base Erosion and Profit Shifting.* OECD Publishing. Retrieved August 10, 2013, from http://dx.doi.org/10.1787/9789264192744-en

OECD. (2013b). *Glossary of Tax Terms*. Retrieved from OECD: http://www.oecd.org/ctp/glossaryoftaxterms.htm#T

Peters, D., Preshaw, D., & Luquet, P. (2004). Cost contribution arrangements. *Tax Review Magazine*. Retrieved August 6, 2013, from http://www.kpmgvergi.com/tr-tr/Hizmetlerimiz/vergi/Transferfiyatlandirmasii/makaleler/Documents/Cost%20contribution%20arrangements.pdf

Pharmaceutical Research and Manufacturing of America. (2013). *2013 Biopharmaceutical Research Industry.* Pharma.

Torvik, O. (2013, March 7). *Arm's Length Pricing.* Norwegian School of Economics, Bergen, Norway.

United States Treasury Regulations. (1996). *Sharing of costs.* Retrieved August 7, 2013, from Justia US Law: http://law.justia.com/cfr/title26/26-6.0.1.1.1.0.8.187.html

Valuation Research Corporation. (2008, September). *Valuation Reseach Corporation*. (T. Miller, Editor) Retrieved August 4, 2013, from www.valuationreseach.com: http://www.valuationresearch.com/assets/kb/4_CostSharing.pdf

World Health Organization. (2014). *Trade, foreign policy, diplomacy and health - Pharmaceutical Industry*. Retrieved from World Health Organization: http://www.who.int/trade/glossary/story073/en/

Zimmer, F. (2009). *Internasjonal inntektsskatterett.* Oslo: Universitetsforlaget.

7 Attachments

7.1 Attachment 1: Comparison of CCAs with the licensing structure.

CCAs on services not creating IP	Licensing of intragroup services
Sharing of costs, risks and benefits where all participants contribute in cash or in kind	Limited to the provision or acquisition of a service by members of the MNE Group. The risk of not successfully and efficiently providing the service is generally borne by the service provider
If a participants joins or leaves the CCA, shares should be adjusted in accordance with the ALP	Terminating or extending the service agreement to other participants has generally no implication on other service recipients
Written agreements and appropriate documentation is important	Formal contracts not always available. The agreement is usually limited to the direct relationship between the provider and the recipient
All participants are contributing to a common activity and shared costs reflect expected benefits	The provider charge a cost plus price, requiring an element of profit for providing the service
Allocation of costs are based on expected benefits	The allocation key is based on the extent each company has requested the service

(EU Joint Transfer Pricing Forum, 2012)